TOSHIBA

DIGITAL HIGH DEFINITION RECEIVER

HD-C26H

OWNER'S MANUAL





APPENDICES

FUNCTIONS

INTRODUCTION

STARTUP GUIDANCE



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PRECAUTIONS

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR

MOISTURE.

TO PREVENT ELECTRIC SHOCK, DO NOT OPEN THE COVER. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

This unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the unit itself is in standby mode.

NOTE

The rating label and the safety caution are on the rear of the unit.

Changes or modifications to this equipment not expressly authorised or approved by Toshiba could void the product warranty and/or cause damage to the product.

In order to continue to get the maximum performance from your receiver:

- Make sure that it is set up properly.
- Have it regularly inspected by qualified service personnel.
- Make sure that all family members learn to operate it properly.

In particular: To prevent electric shock, instruct children not to insert objects into the receiver's holes or slots.

POWER CORD CAUTIONS

- When plugging in or unplugging the power cord, hold it by the plug. Do not unplug it by pulling on the cord.
- Do not touch the cord with wet hands as this could cause electrical shock or short.
- Do not place furniture, etc., on top of the power cord.
- Do not tie up the power cord, or connect a different power cord.
- Route the power cord so that it is not stepped on, or tripped over.
- Using a damaged power cord could result in fire or electric shock. Inspect the power cord for damage. If damaged, consult your nearest TOSHIBA service centre.

SAFETY MEASURES ON PROPER USAGE

Pay attention to the following items when using this unit. Failure to do so may result in electric shock or damage to the unit.

- 1. Connect the power plug to AC 100-240V 50/60Hz.
- 2. Unplug the power cord from the receiver before connecting any other equipment, especially the TV antenna. Connect all equipment to the receiver before plugging any power cords to the power source.
- 3. Be sure your TV antenna is not located near overhead power lines, or where it might fall into any power lines. Also be careful to avoid touching any such power lines when installing the TV antenna.
- 4. Do not attempt to modify the unit.
- 5. If you hear a strange sound or notice smoke coming from the unit or feel that the unit is too hot to touch, turn the power off immediately, unplug the power cord, and consult with your local sales outlet.
- 6. Do not insert metal objects, paper or liquids into the unit through the ventilation openings, etc. This could result in fire or electric shock. In the event something is inserted inside, turn the power off, unplug the power cord and consult your local sales outlet.
- 7. Do not place objects that may block the ventilation openings of the unit such as a piece of cloth.
- 8. Do not place vases, bottles, containers, naked flame sources such as lighted candles etc., on top of or near this unit.
- 9. When transporting, do not vibrate or shake the unit. This may result in damage or faulty operation.
- 10. If a three-prong power plug is provided with receiver, be sure it is used with a properly grounded threewise power socket.
- 11. When transporting the unit, be sure to turn off the power and disconnect all cables.
- 12. When not using the unit for a long period of time (when on vacation, etc.) unplug the power cord.
- 13. Avoid overloading electrical outlets or extension cords otherwise it could result in electric shock or fire.
- 14. When lightning begins, do not touch any part of the receiver including the power cord and any connected cables.

DO NOT use or place the receiver in the following environments:

- 1. Near heat sources
 - Places subject to direct sunlight
 - Near radiators or air ducts
 - On top of an amplifier
- 2. Dusty places
- 3. Places subject to vibration or shock
- 4. Near strong magnetic fields such as loudspeakers or large motors
- 5. Places subject to moisture such as a kitchen or bathroom
- 6. Places without adequate air circulation
 - On top of a carpet or sofa
 - In a bookcase
 - Near materials such as curtains, etc.
- 7. Extremely hot or cold places The operating temperature range of this unit is 5°C to 40°C

MOISTURE CONDENSATION

Never operate this receiver immediately after moving it from a cold location to a warm location. After moving, leave the receiver in the warm location for TWO TO THREE hours without operating it so as to dry the moisture condensation naturally.

Moisture condensation is most likely to occur in the following cases:

- When moved from a cold location to a warm location.
- In a room rapidly heated or in a place where the receiver is directly exposed to cool flow of air from an airconditioner or other electrical appliance.
- In a room with excessive dampness or high humidity.

\wedge	This power plug is used in Australia only
\wedge	This power plug is used in some other regions

NOTES ON POWER PLUGS

- The diagrams above are strictly for illustration purposes only.
- Only one power plug is included in the receiver's accessory box (page 58).

NOTES ON COPYRIGHT

• It is forbidden by law to copy, broadcast, show, broadcast on cable and play in public copyrighted material without permission.

NOTES ON HANDLING

- This unit is susceptible to surrounding environmental changes such as shock, vibration and temperature.
 - 1. Do not apply shock or vibration to the unit.
 - 2. Do not use the unit on a shaky or unstable place.
 - 3. Do not install the unit on a non-flat surface.
 - 4. Do not cover up the ventilation holes of the unit.
 - 5. Do not use the unit in a high temperature environment or environment with extreme changes in temperature.
 - 6. Never remove the top cover, disassemble or modify the unit. Moreover, removing the top cover voids the warranty even if the product is within the warranty period.
- When moving the unit to a remote location, cover the unit with a piece of cloth to prevent injury. Also, take care not to shake or apply shock to the unit.
- The top cover or rear panel may become warm after operating for a long time. This is not a malfunction.
- Do not use insecticide sprays, etc., near the unit. Also, do not leave rubber or plastic objects in contact with the unit for long periods of time. This may cause discoloring of this unit's finish.
- Keep the original packing that this unit came in and use it to re-pack the unit when moving or transporting.

ABOUT CLEANING

- Do not use solvents such as benzene, alcohol or thinner to clean the unit. These solvents may distort the chassis or damage its finish. If rubber or vinyl products remain in contact with the unit for a long time, a stain may result.
- When the unit becomes dirty, clean it gently with a piece of soft, dry cloth.
- When the unit is very dirty, remove the power plug from the wall socket and use a piece of damp cloth to wipe the unit clean. Finish the cleaning with a piece of dry cloth.

DISCLAIMER

This manual has been validated and reviewed for accuracy. The instructions and descriptions it contains are accurate for the HD-C26H receiver at the time of this manual's production. However, succeeding units and manuals are subject to change without notice. Toshiba assumes no liability for damages incurred directly or indirectly from errors, omissions or discrepancies between the receiver and the manual.

Exemptions

- Toshiba is not liable for any damage caused by fire, natural disaster (such as thunder, earthquake, etc.) acts by third parties, accidents, misuse, or uses in other improper conditions.
- Toshiba is not liable for incidental damages (such as profit loss or interruption in business, etc.) caused by use or inability to use of this product.
- Toshiba is not liable for any damage caused by neglect of the instructions described in the owner's manual.
- Toshiba is not liable for any damage caused by misuse or malfunction through simultaneous use of this product and the connected equipment.

Thank you very much for purchasing this Toshiba Digital HD Receiver HD-C26H.

In order to enjoy the many features this receiver has to offer, read this owner's manual thoroughly before using.

We hope that you are completely satisfied with your Toshiba Digital HD Receiver and it will give you long and enjoyable service. We look forward to providing you with additional Toshiba products to serve all of your entertainment needs in the future.

In the space provided below, record the Serial Number located on the rear panel of your receiver.

Model No. HD-C26H Serial No.

Retain this information for future reference.

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INTRODUCTION

Toshiba HD-C26H Digital High Definition Receiver opens up to a new world of free-to-air terrestrial HDTV (High Definition Television) and SDTV (Standard Definition Television) programs. The receiver can receive channels from both VHF and UHF bands. All the major terrestrial free-to-air station numbers currently available in your area are listed in the on-screen menu. To watch a channel, simply select the channel number and you will be accessing a wide range of high quality digital programs.

The receiver is fully MPEG 2 / DVB-T compliant, delivering high definition crystal-sharp video and Dolby® Digital sound. As it supports a channel frequency range of 51-858MHz, it can be easily programmed for all the channels within the VHF and UHF frequency bands. To find out the channel frequencies in your area, please contact your local service provider.

FEATURES

▶ HD 1080i/720p/576p Capability

High Definition (HD) brings a wide-screen format to the home television as well as a sharper picture. This unit accepts all DTV formats, including 1080i, 720p and 576p.

► HDMI^{™1}

Toshiba HD-C26H incorporates the High-Definition Multimedia Interface (HDMI) technology to provide the best video and audio quality over a single cable.

► WEEKLY EPG

Programs for the whole week are available in the EPG provided the broadcasters broadcast these data.

► Video Format Auto-Switch

The HD-C26H receiver has the capability of automatically switching the output video format to match the native video format coming from the broadcaster. This reduces possible distortion due to up/down conversions.

► Dolby® Digital²

Dolby® Digital is the surround sound technology used in theatres showing the latest movies, and is now available to reproduce this realistic effect in the home. You can enjoy motion pictures and live concert TV programs with this dynamic realistic sound by connecting HD-C26H to a 6-channel amplifier equipped with a Dolby® Digital decoder.

► PIP (Picture-in-Picture)

This feature gives you the ability to view 2 different live channels (from the same frequency) at the same time. The PIP window can be moved to any corner of the screen or be formed as a double window.

► Teletext/Fastext

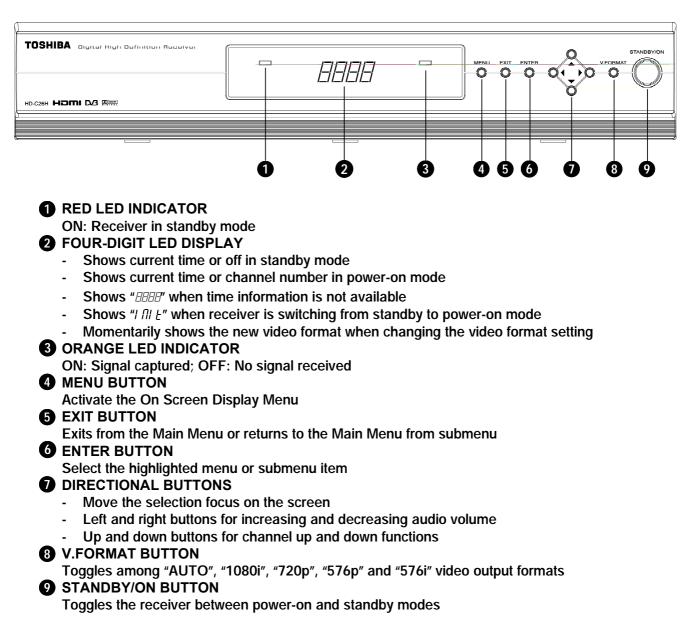
Fastext is a method of viewing Teletext pages by related subjects grouped by the broadcast studio. You can access any given topic shown on the screen simply by pressing the corresponding colored text select button on the remote control. Note that the Fastext feature is not available in Australia.

¹ HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

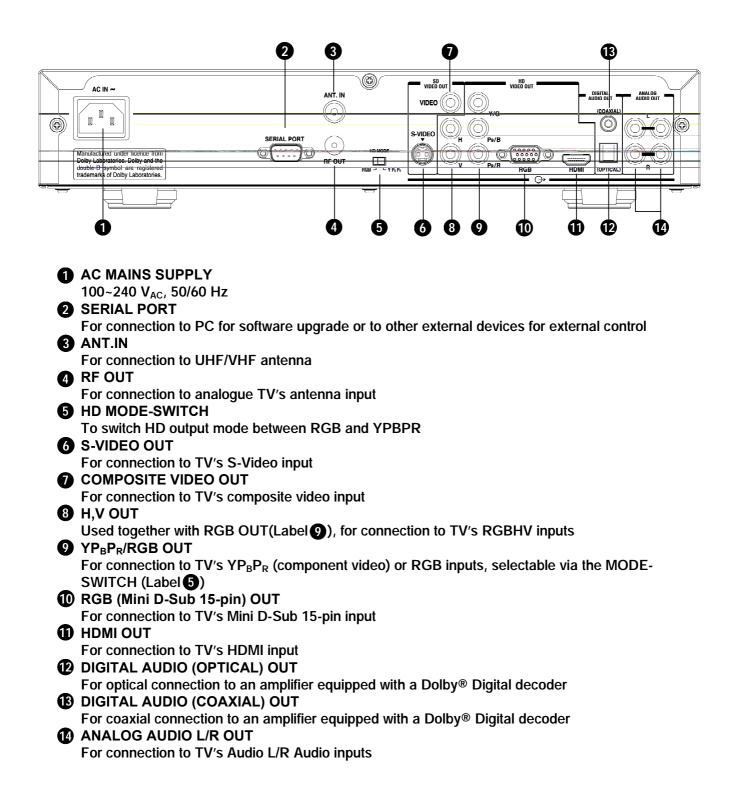
² Manufactured under licence from Dolby Laboratories. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

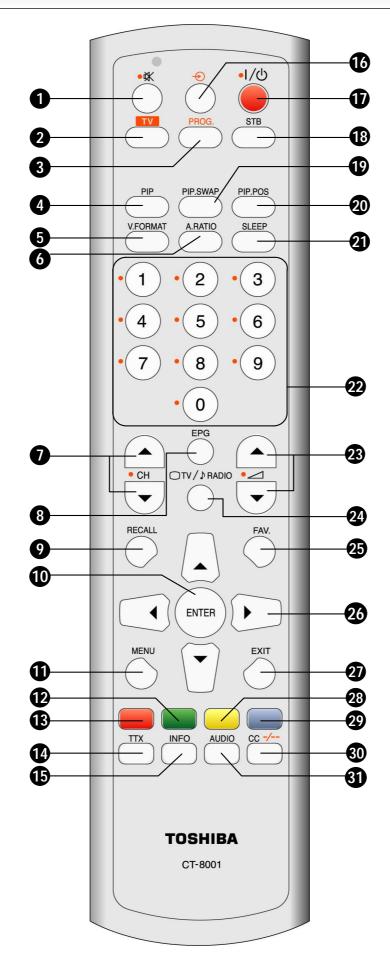
IDENTIFICATION OF CONTROLS

FRONT PANEL



REAR PANEL





REMOTE CONTROL

1	MUTE button ⇔ Page 26	Ð	STANDBY/ON button 🖒 Page 24
2	TV FUNCTION button*	18	SET TOP BOX button**
3	PROG. Button 🗘 Page 60	19	PIP SWAP button 🗘 Page 44
4	PIP button 🗘 Page 44	20	PIP POS. button 🗘 Page 44
5	VIDEO FORMAT button 🗘 Page 45	21	SLEEP button C Page 46
6	ASPECT RATIO button 🗘 Page 46	22	CHANNEL NUMBER button ▷ Page 26
7	CHANNEL UP/DOWN buttons CPage 26	23	VOLUME UP/DOWN buttons 🗘 Page 26
8	EPG button 🗘 Page 43	24	TV/RADIO button C> Page 43
9	RECALL button ▷ Page 47	25	FAV. button 🗘 Page 44
1	ENTER button	26	DIRECTIONAL buttons
1	MENU button 🗘 Page 29	2)	EXIT button
12	GREEN button	28	YELLOW button
B	RED button	29	BLUE button
14	TTX button ⊑> Page 45	30	CC/DIGIT SELECTION button C Page 60
Ð	INFO button ⊑> Page 42	31	AUDIO button 🗘 Page 47
16	INPUT SELECT button └> Page 60		

* TV FUNCTION – Set the Remote Control Unit to function with the Television Set. See RCU programming guide on page 60.

** SET TOP BOX- Set the Remote Control Unit to function with the Set Top Box.

Chapter Two

STARTUP GUIDANCE

Read this chapter first to make all necessary preparations.

1 Installing the Receiver	16
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- Setting up your receiver	24
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INSTALLING THE RECEIVER

Follow steps A to C below. Your receiver will be ready to display digital programs on your TV.

STEP A: CONNECTIONS

DO NOT PLUG THE RECEIVER INTO THE MAINS YET.

Before you use this receiver, it is necessary to connect it to your TV.

1 CONNECTING TO TV

1-1. Connection to Antenna

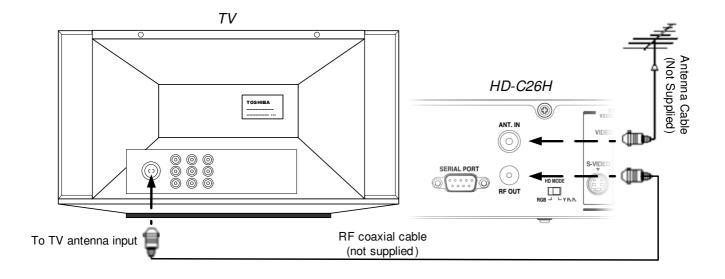
Disconnect the antenna cable from your TV and connect it to the "ANT. IN" terminal on the back of the receiver.

1-2. "RF OUT" Connection to TV or VCR

This "RF OUT" provides you a RF loop-through function to receive analogue TV programs as well as digital programs. Use an RF coaxial cable (not supplied) to connect the HD-C26H "RF OUT" terminal to TV's or VCR's antenna input.



Before connecting or disconnecting the antenna cable, unplug the receiver, VCR, TV and antenna booster, if any.



1-3. Connections to TV – Video Connection

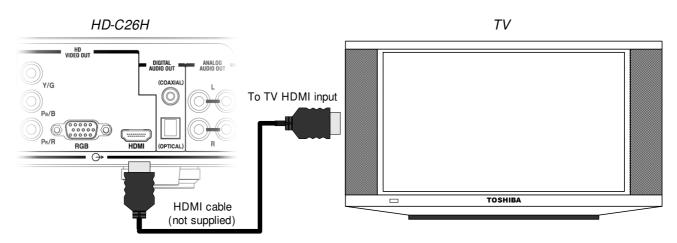
In the accessory box, you will find two sets of cables: One is the component video cable (with red, green and blue connectors) and the other is the Audio/Video cable (with yellow, white and red connectors).

For better video quality, it is recommended that you use the HDMI cable, the Mini D-Sub 15-pin cable or the RGBHV video cable (with 5 RCA connectors). These cables are not included in the HD-C26H package.

HD MODE Switch selection is essential for several outputs. Refer to the HD MODE Switch table on page 54 for making the correct switch selection according to your output connection.

You have 6 choices for connecting the video output from the receiver to your TV. Use only **one** of the following connections (with **(a)**, **(b)** or **(c)** being the **best** choice):

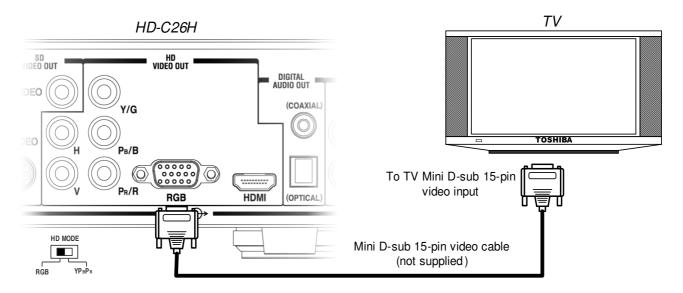
(a) HDMI connection: If your TV has HDMI input, use a HDMI cable (not supplied) to connect the receiver to your TV. HDMI supports video and multi-channel audio in a single cable; therefore separate connection for audio is not necessary.



Note: Because HDMI is an evolving technology, it is possible that some TVs may not operate properly with the receiver.

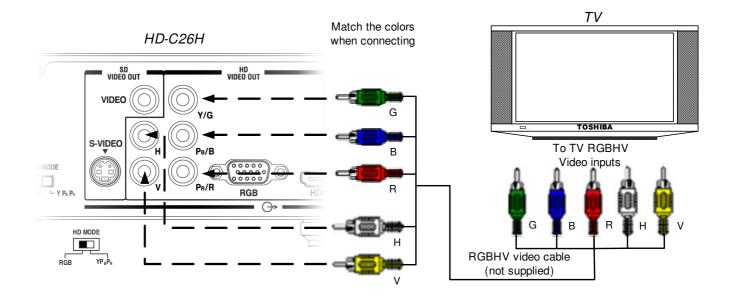
(b) Mini D-Sub 15-pin connection: If your TV has a RGB Mini D-Sub 15-pin video input connector, use a Mini D-Sub 15-pin cable (not supplied) to connect the receiver to your TV. Set the HD MODE Switch (refer to page 54) to RGB, and then connect the RGB connector on the rear of the receiver to the corresponding socket on the TV.

Do not connect any PC monitor to the receiver via Mini D-Sub 15-pin cable.



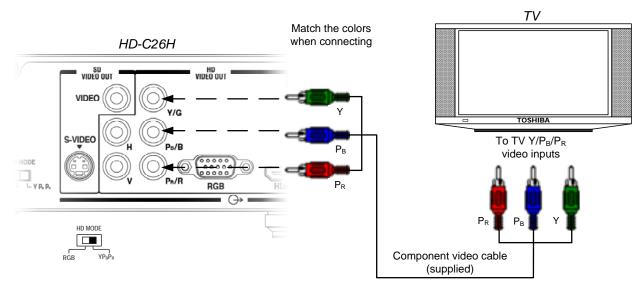
Note: This diagram illustrates video connections only. Refer to Page 20 for Audio connection.

(c) RGBHV (RCA) connection: If your TV has RGBHV video inputs, use a RGBHV video cable (not supplied) to connect the receiver to your TV. Set the HD MODE Switch (refer to page 54) to RGB, and then connect the Y/G, P_B /B, P_R/R, H and V connectors from "HD VIDEO OUT" on the rear of the receiver to the corresponding jacks on the TV.



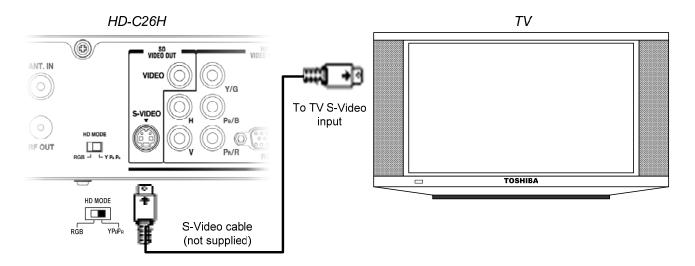
Note: This diagram illustrates video connections only. Refer to Page 20 for Audio connection.

(d) YP_BP_R connection: If your TV has component video inputs, use the component video cable included in the HD-C26H accessory box. Set the HD MODE Switch (refer to page 54) to YP_BP_R, and then connect the Y/G, P_B/B and P_R/R connectors from "HD VIDEO OUT" on the rear of the receiver to the corresponding jacks on the TV.



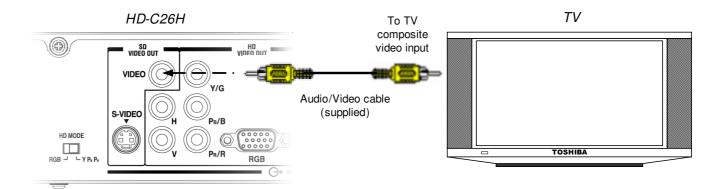
Note: This diagram illustrates video connections only. Refer to Page 20 for Audio connection.

(e) S-Video connection: If your TV has an S-Video input, use an S-Video cable (not supplied) to connect the receiver to your TV. Set the HD MODE Switch (refer to page 54) to YP_BP_R, and then connect the S-Video connector from "SD VIDEO OUT" on the rear of the receiver to the corresponding jack on the TV.



Note: This diagram illustrates video connections only. Refer to Page 20 for Audio connection.

(f) Composite video connection: If your TV has composite video inputs, use the yellow connector of the Audio/Video cable included in the HD-C26H accessory box. Connect the yellow video connector from "SD VIDEO OUT" on the rear of the receiver to the corresponding jack on the TV.

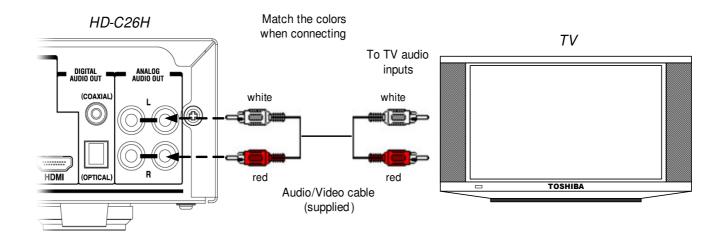


Note: This diagram illustrates video connections only. Refer to Audio connection below.

1-4. Connections to TV – Audio Connection

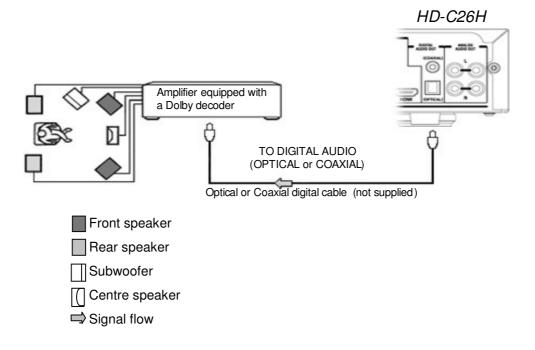
For audio connections, you have two choices. You can connect the receiver to your TV or to an audio amplifier equipped with a Dolby® Digital decoder. If you **do not** have an external amplifier equipped with a Dolby® Digital decoder, use the red and white connectors of the Audio/Video cable included in the package. Connect the audio connectors from "ANALOG AUDIO OUT" on the rear of the receiver to the corresponding jacks on the TV: red to red (right audio) and white to white (left audio).

Note: If your TV has only one audio input jack, connect either the right or left audio connector to the audio jack. **Do not** connect the yellow connector to TV if using HDMI, RGB, component video or S-Video connector.



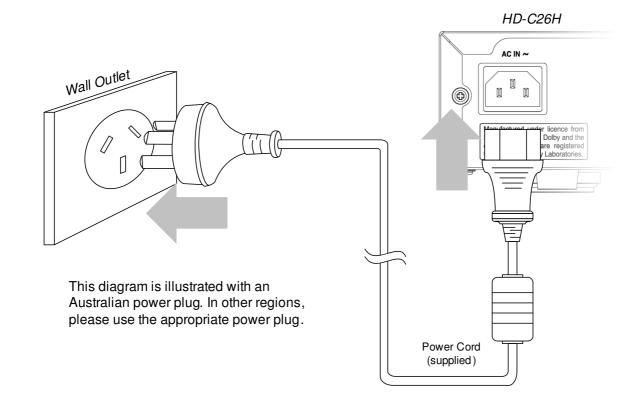
2 connecting to amplifier

If you connect this receiver to an audio amplifier equipped with a Dolby® Digital decoder, use an optical or coaxial digital cable (not supplied) to connect from the receiver's "DIGITAL AUDIO OUT (Optical/Coaxial)" to the digital audio input of your amplifier. In this case make sure that you <u>DO NOT</u> need to connect the audio connectors (red and white) on the Audio/Video cable to your TV.



$m{3}$ connecting to mains supply

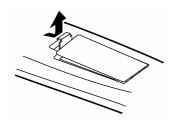
Plug the receiver into the mains.



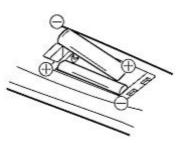
STEP B: PREPARING YOUR REMOTE CONTROL

Loading batteries

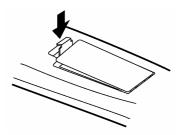
1. Open the Cover.



2. Insert two R03 (AAA size) batteries.



- Make sure to match the + and signs on the batteries to the marks inside the battery compartment.
- **3**. Close the cover.



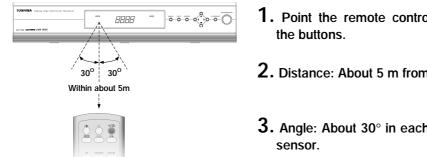
Notes on batteries

Improper use of batteries may cause battery leakage and corrosion. To operate the remote control correctly, follow the instructions below.

- Do not insert batteries into the remote control in the wrong direction.
- Do not charge, heat, open, or short-circuit the batteries. Do not throw batteries into fire.
- Batteries contain toxic substances. Do not dispose of them with ordinary trash. Dispose of batteries only in accordance with local ordinances.
- Do not leave dead or exhausted batteries in the remote control.
- Do not use different types of batteries together, or mix old and new batteries.
- If you do not use the remote control for a long period of time, remove the batteries to avoid possible damage from battery corrosion.
- If the remote control does not function correctly or if the operating range becomes reduced, replace all batteries with new ones.

• If battery leakage occurs, wipe the battery liquid from the battery compartment, then insert new batteries.

Operating with the remote control



- **1.** Point the remote control at the remote sensor and press the buttons.
- **2.** Distance: About 5 m from the front of the remote sensor.
- **3.** Angle: About 30° in each direction of the front of the remote sensor.
- Do not expose the remote sensor of the receiver to a strong light source such as direct sunlight or other illumination. If you do so, you may not be able to operate the receiver via the remote control.
- Do not drop or give the remote control a shock.
- Do not leave the remote control near an extremely hot or humid place.
- Do not spill water or put anything wet on the remote control.
- Do not disassemble the remote control.

STEP C: SETTING UP YOUR RECEIVER

Note: If your service provider or antenna installer has already installed your TV system to receive terrestrial TV programs, do not change any connections of those devices or installation settings unless it is absolutely necessary.

If your service provider or system installer has not configured your receiver, it will not be set up for any specific channel or frequency when powered on for the first time. In this case you should follow the steps below to set up your receiver.

1. Switch on the TV.

2. Using your TV's remote control, select the appropriate external Audio/Video input on your TV according to the connection you have made in Step A.

3. Make sure the receiver is already in power-on mode (Left RED LED on front panel is off). If it is in standby

mode (Left RED LED in red colour), switch on the receiver by pressing the "STANDBY/ON" button on the front

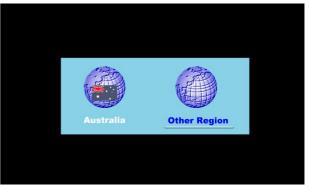
panel of the receiver or on the remote control.

4. A message "Database is Empty" should appear after a while. If you can see the message, go to Step 5 directly. However, if you cannot see the message on the screen even after a long time, change the video format by pressing V.FORMAT button on remote control or on the front panel. Press V.FORMAT button until you see the message "Database is Empty".

Note: When you press V.FORMAT button, the Video Format Indicator on the receiver's front panel will display among "576i" (for HD MODE Switch being set to YP_BP_R only), "AUTO", "1080i", "720p" and "576p". After you press V.FORMAT button, make sure the front panel display has changed before you press the button again.

5. After you see a message "Database is Empty" appears, press the "MENU" button. A "Region Selection" menu appears.

- Use the directional buttons "" and "" to highlight your region of residence and press the "ENTER" button to make your selection. The region setup process may take a few minutes to complete.
- If the "Region Selection" menu does not appear, refer to "RESET DATA" on page 31 to reset the database.



6. You will see the Main Menu (page 29). Press the " " button twice to highlight "INSTALLATION" and then press "ENTER". When prompted, enter "0000" which is the default password.

7. To tune the receiver, you have choices of MANUAL SETUP / AUTO SCAN / QUICK SCAN. We recommend that you use "QUICK SCAN" (page 30) for a faster setup. For more information on the various tuning options, refer to pages 30~31.

Note: The choices of AUTO SCAN and QUICK SCAN are for Australia only.

8. If you use "QUICK SCAN" in step 7 and when you see the message ">>> SCAN COMPLETE <<<", press the "EXIT" button several times until the main menu disappears.

9. After you finish scanning, you can choose the suitable V.FORMAT. If you use an SDTV, use the V.FORMAT "576i"; If you use a HD-ready TV, you are recommended to change to "AUTO" by pressing V.FORMAT button; However, if your HD-ready TV cannot display some specific video format, press V.FORMAT button to change to an appropriate fixed format.

10. Congratulations! You have successfully setup your receiver.

VIEWING PROGRAMS

1. After you have tuned the receiver, you have several ways to navigate through all programs:

- Press the "CHANNEL NUMBER" or "CHANNEL UP/DOWN" buttons to select a program of your interest.
- Press the "TV/RADIO" button to call up the "Program List" (page 43) and select a program of your interest. This will also set your viewing mode to "Normal".
- Press the "FAV." button to call up the "Favorite Channel List" and select a program of your interest (page 44). Entries in this "Favorite Channel List" are those that you have added under "FAVORITE&LOCK" (page 38). This will set your viewing mode to "Favorite".
- Use the "CHANNEL UP/DOWN" buttons to view the previous and next program. The programs are arranged according to the "Program list" or "Favorite Channel List" (depending on your current viewing mode). See "I-PLATE (INFO)" on page 42 for more information on viewing modes.
- **2**. Press the "INFO" button to view details on a program.
- **3**. Press the "EPG" button to view the Electronic Program Guide on a weekly basis.

4. Press the "VOLUME UP/DOWN" buttons to increase or decrease the audio volume, or press the "MUTE" button to turn off the audio output.

5. The information contained in this chapter ("STARTUP GUIDANCE") is only meant to be a quick installation guide. Familiarize yourself with other functions of the receiver by reading the remaining chapters in this manual.

TURNING OFF THE RECEIVER

Set the receiver to standby mode by pressing the "STANDBY/ON" button.

If you would not use the receiver for a long time, unplug the power cord from the wall outlet to completely eliminate all voltages.



FUNCTIONS

1 Menu

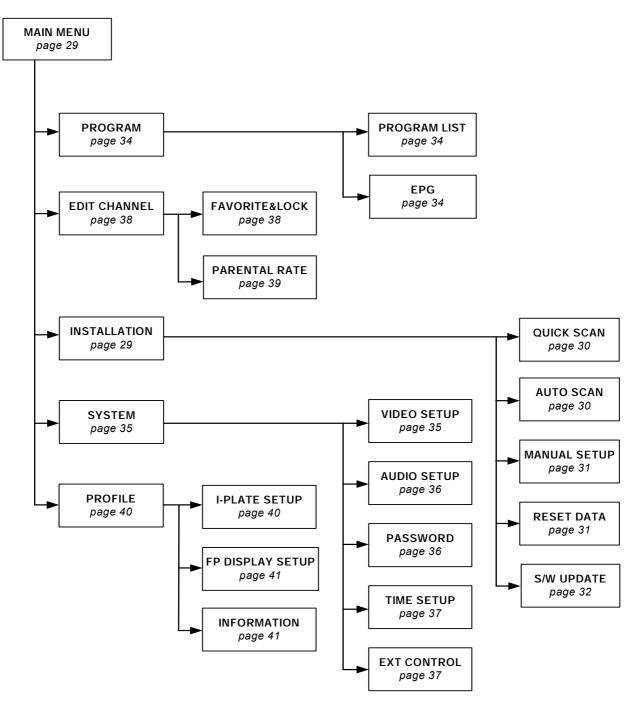
Me	enu Map	28
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MENU MAP

Use the directional buttons to navigate through the menu, "ENTER" button to choose specific items, and "EXIT" button to return to the main menu from sub-menu or to leave the main menu.



Note: If you leave the menu screen for a long period of time, a permanent afterimage may remain on the TV screen.

MAIN MENU

There are two ways to enter the Main Menu when the receiver is powered on:

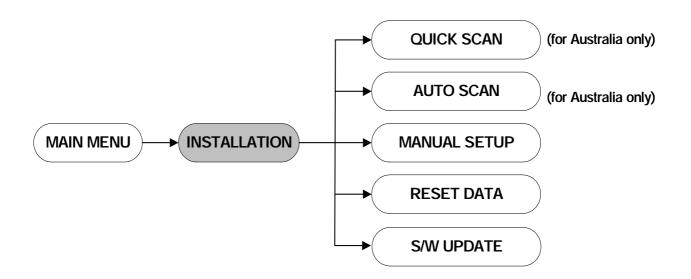
- 1. On the remote control, press the "MENU" button.
- **2.** Alternatively, press "MENU" button on the front panel.
- **3.** Use the directional buttons to navigate through the menu, "ENTER" button to choose specific items, and "EXIT" button to return to the main menu from submenu or to leave the main menu.
- **4.** Menu(s) left displayed for 15 minutes will exit automatically.



INSTALLATION

On the main menu, select "INSTALLATION" and key-in your password to enter the "INSTALLATION" page. The default password is 0000. Refer to page 36 to change the password.

If you are in Australia, you have choices of MANUAL SETUP / AUTO SCAN / QUICK SCAN to tune the receiver. If you stay in other region, use MANUAL SETUP to tune the receiver.



QUICK SCAN (For Australia Only)

The "QUICK SCAN" feature allows you to scan all predefined digital TV and Radio channel signals in Australia.

- **1.** On the installation page, highlight "QUICK SCAN" and press the "ENTER" button.
- 2. Use the " " and " " buttons to highlight the city you live in and press the "ENTER" button to start scanning.
- **3.** It will scan through respective RF channels available in your city.
- **4.** Once a digital TV/Radio channel is found, the channel number and programs names in this channel will be shown.
- **5.** When you see the message ">>> SCAN COMPLETE <<<", you have completed tuning your receiver. If no channel is found, refer to "TROUBLESHOOTING" in Appendix 2.
- 6. Press the "EXIT" button several times to leave the Main Menu.

Notes:

- 1. The frequencies of the "quick scan" channels are preset in the receiver's database. In case that the local TV/Radio station changes the channel frequency or a new channel comes up, you have to scan these channels using "MANUAL SETUP".
- 2. Receiver is defaulted to TV mode instead of Radio mode after QUICK SCAN.

AUTO SCAN (For Australia Only)

The "AUTO SCAN" feature allows you to scan all predefined digital TV and Radio channels in Australia. The steps required to automatically program the receiver are outlined as below:

- **1.** Highlight "AUTO SCAN" and press the "ENTER" button to start channel search.
- **2.** The receiver starts scanning from channel 2 to channel 69. The status bar shows the progress being made.
- **3.** Once a digital TV/Radio channel is found, the channel number and program name will be shown.
- **4.** When you see the message ">>> SCAN COMPLETE <<<", you have completed tuning your receiver. If no channel is found, refer to "TROUBLESHOOTING" in Appendix 2.
- **5.** Press the "EXIT" button to leave Main Menu.







Notes:

- 1. Auto scan process may take about 18 minutes to complete.
- 2. Receiver is defaulted to TV mode instead of Radio mode after AUTO SCAN.

MANUAL SETUP

- 1. On the "INSTALLATION" page, highlight "MANUAL SETUP" and press the "ENTER" button.
- 2. Select channel number. Be sure you know the channel number and its RF frequency. You may refer to Digital TV and Radio channel table in Appendix 1.
- **3.** Press "" button to highlight "Frequency", "Bandwidth" and "Priority" to make sure the parameters are correct, then press "" button to highlight "Start Scan" and press the "ENTER" button to start scanning.



- If scanning is successful, "Start Scan" will change to "Get Channel Success" and signal quality will be shown. At this point you can press "EXIT" to leave "MANUAL SETUP" or continue scanning other channels.
- If scanning is unsuccessful, "Start Scan" will change to "Timeout Error". At this point you can rescan
 the signal or refer to the SIGNAL LEVEL bar and signal QUALITY for aligning the direction of the
 antenna to get the signal. Refer to your antenna installer if problem persists.

Notes:

- 1. For Australia, the BANDWIDTH should be 7MHz.
- 2. The PRIORITY should be set to "HIGH" for Australia.
- 3. SIGNAL LEVEL refers to the input RF signal strength as perceived by the receiver. Note that too strong a signal may cause erroneous readings. If you use an antenna booster and find that you still get a low signal level, your booster gain may be set too high. In this case, adjust the gain accordingly. You may also see the OSD "Bad or No Signal" or "Weak Signal" when the signal level is low. This signal-level indicator is for reference only.

QUALITY refers to the quality of the received digital signal. A high value of quality means that there are few errors in the signal. In the same way, a low value of quality implies that there are a large number of errors in the signal, which may cause distortions in video and audio.

SNR is the signal-to-noise ratio. A high SNR value means that you have a reasonably good reception (good signal level and good quality).

RESET DATA

Use this function when you want to clear channel data and reset the password to default ("0000").

This function is to be used under any one of the following circumstances:

- When the "Region Selection" menu does not appear on step 5 of page 24;
- When moving to another city.
- **7.** On the "INSTALLATION" page, highlight "RESET DATA" and press the "ENTER" button.
- **2.** Select "YES" to restore to default data.
- **3.** The receiver will reboot automatically. You will see a message "Database Empty" after the boot up process. You can then proceed to set up your

S/W UPDATE

This option in the "INSTALLATION" page updates the software in the receiver. By keeping the system software up-to-date, you enjoy the latest features and bug fixes. However, before you proceed to update the software, consult your local dealer to obtain the latest software and make sure you know how to operate HyperTerminal^{®³} for the Windows^{®⁴} operating system on your computer.

- 1. Highlight "S/W UPDATE" and press the "ENTER" button.
- 2. Use the " " and " " buttons to highlight between "YES" and "NO".
- **3.** Before you select "YES", follow the steps outlined below to configure your PC first:
 - (a) Connect PC to your HD-C26H receiver with a RS232 cable (modem cable).
 - (b) On the PC side:
 - Launch the HyperTerminal® application.
 - Name the connection.
 - Select the correct COM port usually COM1.
 - Use the following COM port settings: baud rate: 115200 data: 8 parity: none stop bit: 1
 - flow control: none
 - After you click the "OK" button, you may see many messages appearing in the HyperTerminal screen. Ignore them and proceed to the next step.
 - Select HyperTerminal's basic function "Transfer".
 - Select "Send File".
 - Browse to select the updated software file.
 - Transfer protocol: "1K Xmodem" DO NOT click on the "Send" button at this time yet.
- **4.** Now that your PC has been properly configured, you can highlight "YES" on the TV screen and press the "ENTER" button on the remote control.
- 5. After selecting "YES", you will see the current software version on the TV screen. Make sure this software version is different from the version of the new software file stored on your PC. Select "YES" again to proceed with the download.
- **6.** Now click on the "Send" button on your PC HyperTerminal to start uploading the new software.
- 7. On the TV screen, you will see the window with a status bar indicating the download progress.





Note: It is safe to turn off the receiver only after the receiver has booted up automatically. Do not disconnect the receiver from the power source during the software update process. If there is a power failure during this time, the receiver may become unusable. In this case, contact your local dealer.

³ HyperTerminal[®] is a registered trademark of Hilgraeve Inc.

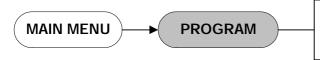
⁴ Microsoft[®] and Windows[®] are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

- **8.** When download is completed, the receiver will reboot automatically. You can now exit HyperTerminal.
- **9.** After the receiver is booted up, you will see a message window informing you that the receiver's database is empty. Note that the password will also be reset to the default "0000". Now press the "MENU" button and select your region of residence.
- **10.** On the Main Menu, select "PROFILE" and then "INFORMATION" to confirm the current software is indeed changed to the new one. You can then proceed to tune your receiver by following "INSTALLATION" instructions on page 29.

Over time, Automatic Software Upgrade service will be available as broadcasters transmit new software of your receiver. It is recommended to carry out the software upgrade so that the receiver is equipped to perform better.

- **1.** When a new version of software for Toshiba HD-C26H is found, an OSD appears prompting for a software upgrade.
- 2. Press the "ENTER" button to accept the software upgrade or the "EXIT" button to cancel.
- **3.** If the software upgrade has been accepted, the system will be rebooted. Upon startup, downloading of the new software will take place. Progress is shown on the front panel display with an "OTA" and a running line.
- **4.** The downloading process usually takes a short while and when it has completed, the system will reboot again. Upon the second startup, the system has completed the upgrading process and the database will be empty as default. Then proceed with the Installation process. (Refer to page 29)





- 1. On the Main Menu, select "PROGRAM"
- 2. Use " " and " " buttons to highlight the options
 - PROGRAM LIST
 - EPG

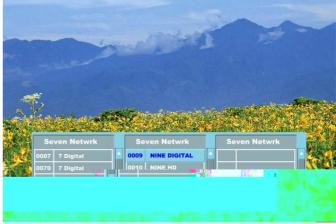


PROGRAM LIST

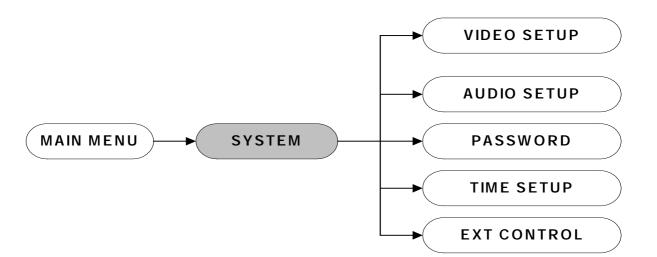
- Highlight "PROGRAM LIST" and press the "ENTER" button. This sets your current viewing mode to "Normal". See "I-PLATE (INFO)" on page 42 for more information.
- **2.** Use the directional buttons to highlight a channel.
- **3.** Press the "ENTER" button to preview a channel and show "Now & Next info". Refer to page 42 "I-PLATE (INFO) for details.
- **4.** To exit from the "PROGRAM LIST", press the "EXIT" button.
- Note: Another way to call up the "PROGRAM LIST" is via the "TV/Radio" button on the remote control. Refer to "TV/Radio" on page 43 for details.

EPG (Electronic Program Guide)

- **1.** Highlight the "EPG" and press the "ENTER" button.
- Note: Another way to call up the "EPG" is via the "EPG" button on the remote control. Refer to "EPG" on page 43 for details.







- **1.** On the main menu, select "SYSTEM".
- 2. Use the " " and " " buttons to highlight the options
 - VIDEO SETUP
 - AUDIO SETUP
 - PASSWORD
 - TIME ZONE
 - EXT CONTROL



VIDEO SETUP

- 1. Highlight "VIDEO SETUP" and press the "ENTER" button.
- 2. Use the " " and " " buttons to highlight the options
 - HD OUTPUT FORMAT
 - ASPECT RATIO

HD OUTPUT FORMAT

Use the "" and "" buttons to switch among video formats "576i" (for HD MODE Switch being set to YP_BP_R only), "AUTO", "1080i", "720p" and "576p". In "AUTO" mode, the receiver switches the video output format to the same as sent by the broadcaster automatically. Otherwise, the receiver will fix its video output at the format you have selected.

SD OUTPUT FORMAT

This setting cannot be changed.

ASPECT RATIO

Use the "" and "" buttons to switch among the three different aspect ratios "4:3 NORMAL", "16:9 WIDESCREEN" and "4:3 LETTERBOX". Refer to the table on page 46 for more information.



Notes:

- 1. Alternatively, you can press the "V.FORMAT" button on the remote control to change the output format as described on page 45.
- 2. You can also press "A.RATIO" button on the remote control to change the aspect ratio as described on page 46
- 3. "AUTO 1080i" means that the receiver is in auto-switching mode and the current video format as sent by the broadcaster is 1080i. Likewise for "AUTO 720p", "AUTO 576p" and "AUTO 576i"
- 4. If, for purposes other than personal viewing, you display a program in a different aspect ratio from its original setting, you may infringe on the copyrights that the program may be under.

AUDIO SETUP

- Highlight "AUDIO SETUP" and press the "ENTER" button.
- 2. Use the " " and " " buttons to select between "AUDIO FORMAT" and "DIGITAL OUTPUT".
- **3.** Press the "ENTER" button to confirm your choice.

DIGITAL OUTPUT

If the broadcasted program contains more than one type of digital audio output, use the "" and "" buttons to switch between the available options "PCM" and "Dolby Digital".

Note: You need to connect the receiver to an amplifier with Dolby® Digital decoding capability via "DIGITAL AUDIO" optical port or coaxial port when "Dolby Digital" option is selected (Refer to page 21 for the connection details). Otherwise, you may encounter softer audio from TV.

AUDIO FORMAT

Use the " " and " " buttons to select the preferred audio format present in the program you are watching.

Note: Alternately, you can pop up the AUDIO SELECTION window by pressing the AUDIO button on the remote control. Refer to AUDIO on page 47.

PASSWORD

1. Highlight "PASSWORD" and R -

9 8.504(J)-4.5495()1.5958()0.55186.5017()1.168



TIME SETUP

- 1. Highlight "TIME SETUP" and press the "ENTER" button.
- **2.** Select your time zone according to the region you are residing in.

For Australia:

Use the " " and " " buttons in TIME ZONE to select the local time zone you are located in.

Use the ""and "" buttons in SYNC ON STANDBY to select whether to let the receiver to synchronize time with the broadcaster if it is in standby mode.

For other region:

Use the "" and "" buttons in LOCAL TIME to set your local time. The GMT will change accordingly. Use the "" and "" buttons in SYNC ON STANDBY to select whether to let the receiver to synchronize time with the broadcaster if it is in standby mode.

Notes: The SYNC ON STANDBY function will boot the receiver from its standby mode to synchronize time information with the broadcaster so as to eliminate the time drifting. It is preset to perform the synchronization at 3 A.M. provided that the receiver is in standby mode at 3 A.M.

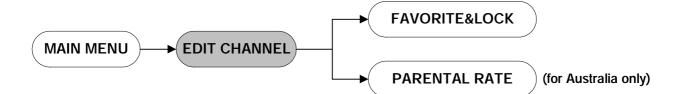




EXT CONTROL

For details of controlling the HD-C26H receiver by an external device connected via the RS-232 serial port, consult your local dealer.

EDIT CHANNEL



- **1.** On the main menu, select "EDIT CHANNEL".
- **2.** Enter your password when prompted.

For Australia:

- Use the " " and " " buttons to highlight the options
 - FAVORITE&LOCK
 - PARENTAL RATE

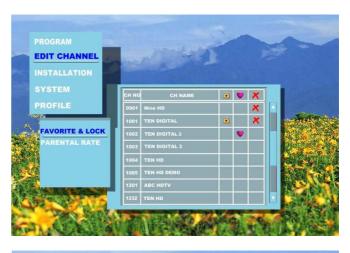
For other regions:

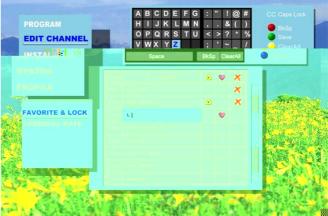
 Only "FAVORITE&LOCK" table will appear. Refer to "FAVORITE&LOCK" description below.

PROGRAM EDIT CHANNEL INSTALLATION SYSTEM PROFILE FAVORITE & LOCK PARENTAL RATE

FAVORITE&LOCK

- Use the " " and " " buttons to select a channel and the " " and " " buttons to highlight a "", """ or """ cell.
- 2. When a cell is highlighted, press the "ENTER" button to perform the following:
 - Toggles locking and unlocking a channel.
 - Toggles adding and removing from Fav. channel list.
 - X: Deletes the highlighted channel.
- **3.** Channel names can be edited by using the virtual keyboard.
- **4.** To activate the virtual keyboard, shift cursor over channel name and press the "Enter" button. Refer to the usage of virtual keyboard on the following page.
- Note: To add back the deleted channel, you need to do Installation again (refer to page 29).





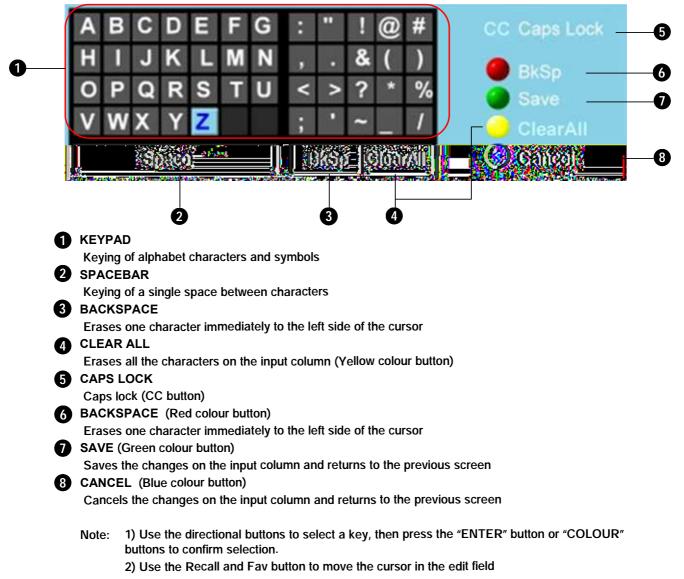
PARENTAL RATE (For Australia Only)

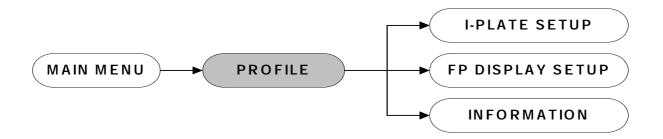
You can limit the type of programs displayed on the TV based on the parental guidance codes listed in Appendix 3. By default, the "PARENTAL RATE" level is set to "No Block", i.e. you can view all types of programs.

- 1. On the "EDIT CHANNEL" page, highlight "PARENTAL RATE" and press the "ENTER" button to block programs.
- 2. Use the " " and " " buttons to select the Rating and press the "EXIT" button to confirm the setting.
- **3.** When DTV programs broadcasted are accompanied by the ratings, the programs will be blocked based on your setting. You have to enter PASSWORD to resume watching the program.

PROGRAM EDIT CHANNEL INSTALLATION	with the second	
SYSTEM PROFILE FAVORITE & LOCK PARENTAL RATE	PARENTAL SETUP No Block Block All Block G and above Block PG and above Block M and above	

VIRTUAL KEYBOARD





- **1.** On the main menu, select "PROFILE".
- 2. Use the " " and " " buttons to highlight the options
 - I-PLATE SETUP
 - FP DISPLAY SETUP
 - INFORMATION



I-PLATE SETUP

- **1.** Highlight "I-PLATE SETUP" and press the "ENTER" button.
- 2. Use the " " and " " buttons to highlight "Display Time" or "Time Format".
- **3.** Use the " " and " " buttons to change the values of the highlighted options.
- **4.** For more information on I-PLATE, refer to page 42.

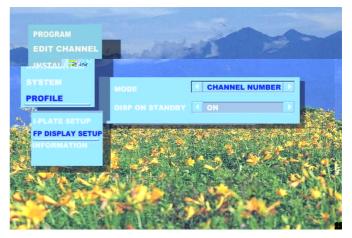


FP DISPLAY SETUP

- **1.** Highlight "FP DISPLAY SETUP" and press the "ENTER" button.
- 2. Use the " " and " " buttons to choose between "MODE" and "DISP BRIGHTNESS".
- **3.** Under "MODE", use the " " and " " buttons to choose between "TIME" and "CHANNEL NUMBER". This will change the Front Panel display information.
- **4.** Under "DISP ON STANDBY", use the "" and "" buttons to choose between "OFF" and "ON". This will change the Front Panel display mode in standby mode. In "ON" state, the Front Panel will show the current time in 24HR format during standby mode. While in the "OFF" state, the seven segmented LED will be off during standby.

Notes:

- 1. TIME mode sets the receiver's front panel Time and Channel Display to show current time. The displayed current time is purely based on the time sent by the broadcaster of the channel you are currently viewing, which may not be accurate.
- 2. When the receiver is in off-air mode, CHANNEL NUMBER sets the receiver's front panel Time and Channel Display to show the channel number sent by the broadcaster.



INFORMATION

1. Highlight "INFORMATION" and press the "ENTER" button to check hardware and software versions.



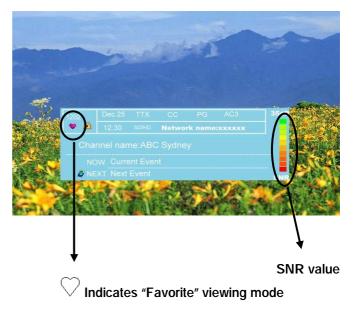
QUICK CONTROL

INFO (I-Plate)

- 1. When watching a DTV program (without any menu on the screen), press the "INFO" button.
- **2.** I-PLATE will pop up with the following information:
 - Current Channel Number
 - Locking status (indicated by a padlock icon)
 - Network Name
 - Program Name
 - Audio System (Dolby® Digital or MPEG)
 - Teletext
 - Closed-Caption
 - Current Local Time (as received from the broadcaster)
 - Date and Month
 - Parental Guidance Code
 - Received program video format
 - SNR value

If you do not press any button within a time-out period (configured in "I-PLATE SETUP" on page 40), the I-PLATE display will disappear. Alternatively, you can press the "EXIT" button to quit I-PLATE earlier.

- **3.** When I-PLATE is still on the TV screen, you can press the green button to set/unset a reminder on the next program. If the reminder will start at the same time with a reminder you have set previously, you can choose to press "ENTER to replace" or "EXIT to cancel".
- **4.** When I-PLATE is still on the TV screen, you can press the "INFO" button again to call up the extended program information (Now & Next) of the current TV channel. Note that the Now & Next info may not be present for some channels.
- **5.** Use " " and " " buttons for details on NOW and NEXT event, and " " and " " buttons for scrolling an event table that consists of more than 1 page.
- **6.** The first row shows channel name, showing time and parental rating. The second row shows program name. The third row shows program genre or empty when data is not broadcasted.
- 7. Press the "EXIT" button to cancel the Now & Next info display.



In "Favorite" viewing mode, "", ", "CH " and CH " buttons allow you to navigate programs in the "Favorite Channel List".

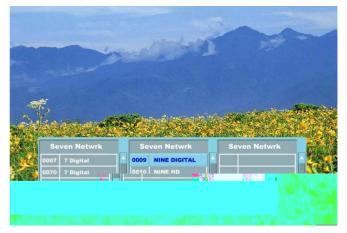


TV/RADIO (PROGRAM LIST)

- When watching a DTV program (with no menu on screen), press the "TV/Radio" button. This sets your current viewing mode to "Normal". See "I-PLATE (INFO)" on page 42 for more information.
- 2. The TV "Program List" will pop up. Scroll list using the directional buttons: "", "", "", " and "". Press the "TV/Radio" button again to switch to Radio "Program List".
- **3.** Press the "ENTER" button to preview a channel. The "Program List" will stay on the screen. You can continue to preview other channels by scrolling the "Program List" and selecting a channel.
- **4.** Press the "EXIT" button to cancel the "Program List". You will see the "I-PLATE" which is described on page 42.

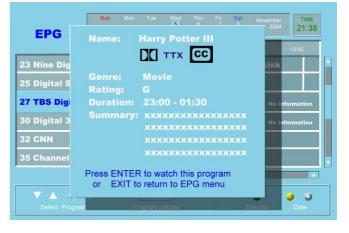
EPG (Electronic Program Guide)

- Press the "EPG" button on the remote control to call up the electronic program guide. Note there is neither video nor sound when you open the EPG window.
- 2. A weekly calendar is presented. Use the "YELLOW" and "BLUE" buttons to select a day.
- **3.** Use the directional buttons " ", " ", " " and " " to select a program.
- **4.** Press the ENTER button to show the program details in a new popup window. Press the ENTER button again (for Current Program only) to exit EPG and watch that program immediately.
- **5.** Press the green button to set/unset a reminder on an impending program.
- **6.** If you set a reminder starting at the same time with a reminder you have set previously, you can choose to press "ENTER to replace" or "EXIT" to cancel".
- 7. When watching a program and the time left is only 15 seconds for a booked program to start, a reminder window will pop up. Press ENTER to switch to that channel or EXIT to cancel this reminder. Reminder won't take effect when a menu page is on the screen.



Note: Receiver remembers and displays the previous TV or Radio setting.





Note: Toshiba does not provide EPG data; therefore, Toshiba is not liable for the content of such data. The data provider may elect to discontinue the service or it may cease to be (or never be) available in your area. In any of these circumstances, the EPG feature will not function. Toshiba is not liable in the event this service

is unavailable or for any consequences arising from customers having used or not being able to use this service.

FAV. (Favorite Channel List)

- Press the "FAV." button on the remote control to call up the "Favorite Channel List". This sets your current viewing mode to "Favorite". See "I-PLATE (INFO)" on page 42 for more information on viewing mode.
- 2. Use the " " and " " buttons to browse through the favorite list and highlight the program you want to watch.
- **3.** Press the "ENTER" button to confirm your choice.
- **4.** Press the "EXIT" button to cancel the list.
- **5.** To exit "Favorite" viewing mode, press the "TV/RADIO" button or any "CHANNEL NUMBER" buttons of a non-favorite program.



PIP (Picture-in-Picture)

- **1.** PIP feature is applicable for High Definition and Standard Definition format programs.
- 2. When watching a TV program (not in the main menu), press the "PIP" button on the remote control to bring up the PIP window.
- **3.** The last seen off-air program using PIP will be shown on the PIP window. Use the "" and "" buttons to browse through different programs in the PIP window just like the way browsing is done in the main window.
- **4.** Press the "PIP.POS" button to toggle among the different modes of the PIP window. For double window mode as shown on the right, the left window is the main window.
- **5.** Press the "PIP.SWAP" button to swap programs between the main window and PIP window.
- 6. To close the PIP window, simply press the "PIP" button.



Notes: If you use the PIP function to view programs for purposes other than personal viewing, you may infringe on the copyrights that the programs may be under.

TTX (Teletext)

- 1. When I-PLATE indicates the presence of Teletext, you can press the "TTX" button on the remote control to view Teletext on the TV screen. If you are in those regions that support Fastext, you may also use the 4 colored buttons for Fastext.
- 2. Use the " " or " " button to view the next or previous TTX page. Use the numeric buttons to input a TTX page number to view the page directly.
- **3.** To exit from Teletext display, you have 3 choices: press the (1)"TTX" button, or (2) "EXIT" button, or (3) "CH " or "CH " button. A message "Teletext/Closed Caption OFF" appears for 5 seconds.

Notes:



- 1. If "TTX / CC ON" appears on the TV screen when you press a button to activate a function, this means the function is not permitted in TTX mode.
- 2. To speed up Teletext browsing, pages you have visited previously will be stored internally in the receiver. If you re-visit a page, you may see old contents being displayed initially but the page will be updated as soon as new information is received from the broadcaster.
- 3. If you leave a fixed text for a long period of time, a permanent afterimage may remain on your screen.

CC (Closed Caption) (For Australia Only)

- **1.** Press the "CC" button on the remote control to call up the subtitle.
- 2. If the current program you preview supports the Closed Caption, a message "CC ON" appears on the TV screen for 5 seconds, and you will see the subtitle appears on the TV.
- **3.** Otherwise if the current program you preview doesn't supports the Closed Caption, a message "CC is not available" appears on the TV screen for 5 seconds.
- **4.** To exit from Closed Caption display, you have 4 choices: press the (1) "CC" button, or (2)"TTX" button, or (3) "EXIT" button, or (4) "CH " or "CH " button. A message "Teletext/Closed Caption OFF" appears for 5 seconds.

Note:



If "TTX / CC ON" appears on the TV screen when you press a button to activate a function, this means the function is not permitted in CC mode

V.FORMAT (Video Format)

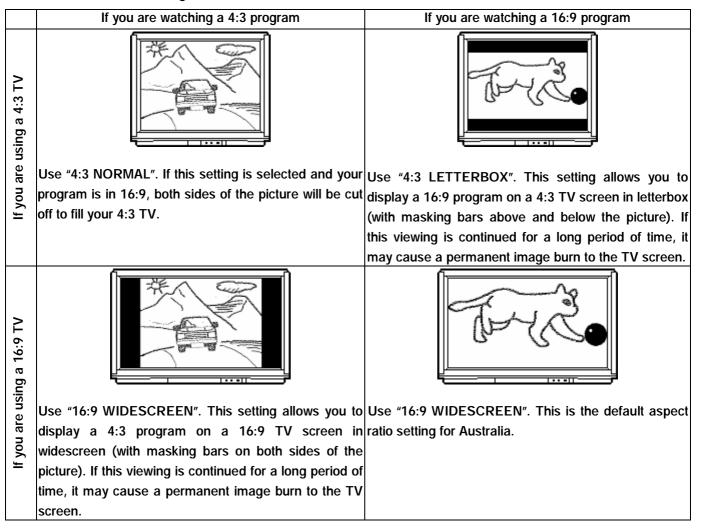
The "V.FORMAT" button on the remote control is used to change the video format setting among "576i", "AUTO", "1080i", "720p", and "576p".

- **1.** 1st button press displays the current video format
- **2.** Next press (within 5 seconds) sets the video format to the next format.

576i \rightarrow AUTO \rightarrow 1080i \rightarrow 720p \rightarrow 576p

A.RATIO (ASPECT RATIO)

- **1.** Press the "A.RATIO" button on the remote control to show current aspect ratio.
- 2. Within 5 seconds, pressing the "A.RATIO" button again will change the aspect ratio. Keep pressing this button will adjust the aspect ratio among "Normal", "Letterbox" and "Widescreen".
- 3. The recommended settings are shown in the table below:



Note: If, for purposes other than personal viewing, you display a program in an aspect ratio different from its original setting, you may infringe on the copyrights that the program may be under.

SLEEP

The "SLEEP" button on the remote control is used to set the off-timer value.

To set the off-timer:

- 1. Press "SLEEP" button to start the timer at "OFF".
- 2. Next press of the "SLEEP" button (within 5 seconds) will set the receiver to the next off-timer value. Use the "SLEEP" button to set the desired off-timer value.
- **3.** The menu turns off after 5 seconds, and the timer starts.

 \rightarrow OFF \rightarrow 30 min \rightarrow 60 min \rightarrow 90 min \rightarrow 120 min -

To check the remaining time:

- **1.** Once the off-timer has been set, press "SLEEP" button once.
- **2.** Current remaining time is displayed on the screen, and then turns off after 5 seconds.

To change the off-timer:

- **1.** Once the off-timer has been set, press "SLEEP" button once.
- 2. Current remaining time is displayed on the screen. Before the OSD turns off, press "SLEEP" button again within 5 seconds, and the off-timer will be changed to the next bigger off-timer value.

For example, if current remaining time is "28 min", press "SLEEP" button again, and off-timer will be changed to "30 min".

 $\overset{28 \text{ min}}{\downarrow} \rightarrow \text{OFF} \rightarrow 30 \text{ min} \rightarrow 60 \text{ min} \rightarrow 90 \text{ min} \rightarrow 120 \text{ min} \rightarrow 12$

If current remaining time is "74 min", press "SLEEP" button again and off-timer will change to "90 min".

 $\rightarrow \text{OFF} \rightarrow 30 \text{ min} \rightarrow 60 \text{ min} \rightarrow 90 \text{ min} \rightarrow 120 \text{ min} \rightarrow 120 \text{ min}$

Note: When the sleep timer has only 1 minute left, an OSD "SLEEP 1 min." will automatically appear and stay on the screen. When the sleep timer counts down to 0, the receiver automatically shuts down by itself to standby mode.

AUDIO

- **1.** Press the AUDIO button on the remote control.
- 2. Use the "" and "" buttons to select the preferred audio format present in the program you are watching.
- **3.** Press the "EXIT" button to cancel the list.



RECALL

The "RECALL" button is used to toggle between present and previous programs

- **1.** In the case you are viewing Program A, and then you change to Program B. You can press the "RECALL" button on the remote control to return to previous program A.
- **2.** Press the "RECALL" button again, and the receiver will show Program B.



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APPENDIX 1 AUSTRALIAN DTV CHANNEL TABLE

The following is a list of DTV channels available in Australia. You can use it for "MANUAL SETUP": On the "MANUAL SETUP" page, select the VHF or UHF channel number and input the Middle Frequency based on "kHz". For instance, if you are in Sydney and want to manually scan "Digital 7", enter "MANUAL SETUP" page, select "Channel 6" and make sure the Frequency is "177500" kHz, then start scanning. Refer to "MANUAL SETUP" on page 31 for details.

City	Stations	Channel Number	Middle Frequency	Transmitter Location	Start Date
Adelaide	Digital 7	VHF 6	177.5MHz	Mt Lofty	1/1/2001
	Digital 9	VHF 8	191.625MHz	Mt Lofty	1/1/2001
	Digital 10	VHF 11	219.5MHz	Mt Lofty	1/1/2001
	Digital ABC	VHF 12	226.5MHz	Mt Lofty	1/1/2001
	Digital SBS	UHF 33	564.5MHz	Mt Lofty	1/1/2001
Brisbane	Digital 7	VHF 6	177.5MHz	Mt Coot-tha	1/1/2001
	Digital 9	VHF 8	191.625MHz	Mt Coot-tha	1/1/2001
	Digital 10	VHF 11	219.5MHz	Mt Coot-tha	1/1/2001
	Digital ABC	VHF 12	226.5MHz	Mt Coot-tha	1/1/2001
	Digital SBS	UHF 36	585.5MHz	Mt Coot-tha	1/1/2001
Melbourne	Digital 7	VHF 6	177.5MHz	Mt Dandenong	1/1/2001
	Digital 9	VHF 8	191.625MHz	Mt Dandenong	1/1/2001
	Digital 10	VHF 11	219.5MHz	Mt Dandenong	1/1/2001
	Digital ABC	VHF 12	226.5MHz	Mt Dandenong	1/1/2001
	Digital SBS	UHF 29	536.5MHz	Mt Dandenong	1/1/2001
	-			·	
Perth	Digital 7	VHF 6	177.5MHz	Carmel	1/1/2001
	Digital 9	VHF 8	191.625MHz	Carmel	1/1/2001
	Digital 10	VHF 11	219.5MHz	Carmel	1/1/2001
	Digital ABC	VHF 12	226.5MHz	Carmel	1/1/2001
	Digital SBS	UHF 29	536.5MHz	Bickley	1/1/2001
Sydney	Digital 7	VHF 6	177.5MHz	Artarmon	1/1/2001
	Digital 9	VHF 8	191.625MHz	Artarmon	1/1/2001
	Digital 10	VHF 11	219.5MHz	Artarmon	1/1/2001
	Digital ABC	VHF 12	226.5MHz	Artarmon	1/1/2001
	Digital SBS	UHF 34	571.5MHz	Gore Hill	1/1/2001
Gold Coast	Digital 7	UHF 53	704.5 MHz	Mt Tamborine	13/9/2004
	Digital 9	UHF 59	746.5 MHz	Mt Tamborine	13/9/2004
	Southern Cross 10	UHF 43	634.5 MHz	Mt Tamborine	13/9/2004
	Digital 10	UHF 56	725.5MHz	Mt Tamborine	13/9/2004
	Digital SBS	UHF 36	585.5MHz	Mt Tamborine	13/9/2004

City	Stations	Channel Number	Middle Frequency	Transmitter Location	Start Date
Gold Coast	Digital ABC	UHF 62	767.5MHz	Mt Tamborine	13/9/2004
(Continued)	Digital NBN	UHF 68	809.5MHz	Mt Tamborine	13/9/2004
	Digital PRIME	UHF 65	788.5MHz	Mt Tamborine	13/9/2004
Batchelor	000	UHF 50	683.5MHz		
	Digital SBS	UHF 53	704.5MHz	Mardango Cres	2005
	Digital ABC	UHF 56	725.5MHz	Mardango Cres	
	Digital 9	UHF 59	746.5MHz	Mardango Cres	
	Digital 7	UHF 62	767.5MHz	Mardango Cres	2005

City	Stations	Channel Number	Middle Frequency	Transmitter Location	Start Date
Hobart NE	Digital WIN	UHF 65	788.5MHz	Government Hills	
(Continued)	Digital 10	UHF 66	795.5MHz	Government Hills	
	Digital SBS	UHF 64	781.5MHz	Government Hills	

Notes:

- (a) The front panel "Time and Channel Display" (page 11) shows you the logical channel number, which is different from the VHF/UHF channel number shown in the column "Channel Number" of this table.
- (b) If you have trouble getting the signal of a DTV channel, contact your local antenna installer for help.
- (c) The channel table in this manual may not be up-to-date. To get the latest channel table, contact your local dealer.

APPENDIX 2 TROUBLESHOOTING

Phenomenon	Solution
(1) The receiver front panel power indicator	(a) Check the AC mains supply and make sure the power plug is
doesn't light up, and no message on the	well plugged into a stable power outlet.
front panel	
(2) Poor picture quality	(a) Check the antenna and make sure it is aligned to the correct
 occasional picture pixelization 	direction. Use the receiver's "MANUAL SETUP" page to check
	the signal's level and quality when aligning the antenna.
	(b) If you use any kind of amplifier to boost the signal level, check
	whether it works well, and ask help from the antenna installer.
	(c) Ensure that the connectors to antenna are securely fastened.
(3) No sound	(a) Check the receiver and your TV's volume are properly set and
	not in "Mute" mode.
	(b) Check the audio connectors are correctly and firmly connected.
	(c) Make sure the receiver is switched to the correct audio mode:
	Dolby [®] Digital or PCM.
	(d) Rescan this channel by using "MANUAL SETUP".
	(e) Switch to other channels for confirmation on audio.
(4) No picture	(a) Check whether the HD MODE Switch is set to the correct
	mode.
	(b) Check whether your TV supports the receiver's current video
	format. Use the "V.FORMAT" button to switch the video format
	to the one supported by your TV.
	(c) Check the video cable(s) are correctly and firmly connected.
	(d) Rescan this channel by using "MANUAL SETUP".
	(e) Switch to other channels for confirmation on video.
	(f) Reduce RF amplifier gain if connected to RF booster.
(5) Wrong color on screen	(a) Check which connection you are using, RGB or YP_BP_R . Then
	check whether the HD MODE Switch is set to the correct mode.
	(b) Check the video cable(s) are correctly and firmly connected.
(6) Not all channels are available after using	
"AUTO SCAN" when installing the	This phenomenon is caused by unexpected frequency offset, for
receiver for the first time	instance, in Sunshine Coast Australia, channels 47 and 65 are
	transmitted on 662.625 and 788.625MHz by 125kHz offset to the
	legitimate frequencies 662.5 and 788.5MHz. HD-C26H can receive
	these channels by "AUTO SCAN" most of the time, but we suggest
	that you use "MANUAL SETUP" when installing the receiver for the
	first time. Once the receiver picks up the signal, all the transmission
	parameters will be stored in the receiver's memory.
(7) Not all channels are available after using	
"QUICK SCAN"	(b) If you still cannot get some channels, use "MANUAL SETUP" to
	scan them one by one.
(8) Cannot lock signal by using "MANUAL	(a) Check the frequency that you entered is exactly the center
SETUP"	frequency of the wanted channel.
	(b) Refer to solutions in Phenomenon (2) above.
(9) No Teletext / Closed Caption	Make sure the channel that you are watching carries Teletext /
	Closed Caption information from I-PLATE.
(10) Cannot receive channels after moving	Refer to page 31 to reset data.
the receiver between cities (e.g. from	
Melbourne to Sydney)	
(11) The remote control does not work	(a) Point the remote control at the remote sensor of the receiver.
properly	(b) Operate the remote control within about 5m.
	(c) Replace the batteries with new ones.
	(d) Ensure the remote control is in STB mode by pressing the STB
	button.

On Screen Message

Message	Solution
(1) Bad Signal	 (a) Check the antenna is connected correctly and firmly to the tuner input (ANT.IN) of the receiver. (b) Refer to solutions for Phenomenon (2) on page 53.
(2) Database is Empty	No channel data available in the box. Refer to page 29 for reinstallation.
(3) Incorrect Password	Input the correct password.
(4) Program under Parental Control	Input the correct password or change parental-rate (see page 39) to view the program.
(5) Program Locked	Input the correct password or change lock setting in menu (see page 38) to view the program.
(6) Weak Signal	Make sure antenna or signal input cable is connected correctly.

HD MODE Switch Selection

HD MODE Output	RGB	YP _B P _R
HDMI	✓	✓
RGB Mini D-Sub	✓	
RGBHV	✓	
YP _B P _R		✓
S-Video		\checkmark
Composite	✓	✓

APPENDIX 3 PARENTAL GUIDANCE CODES

I

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Recommended on-screen-display for parental guidance codes transmitted within DVB-SI EIT information using the DVB parental_rating_descriptor.

		·		Sug	gested OS	eiver Ment 5D Wordin Restriction	g for Setti	nd ng Blockir	ıg	
			Block All	Block G and above (optional)	Block PG and above	Block M and above	Block MA and above	Block AV and above	Block R and above	No Bloo
Transmitted rating hex code	Australian parental guide code	On-screen display				eiver action am — X i				1
0×00	Not Classified	-	X	√	\checkmark	 ✓ 	\checkmark	\checkmark	✓	~
0×01			X	\checkmark	\checkmark	\checkmark	\checkmark	~	✓	~
0×02	P Pre school	P	x	✓	\checkmark	✓ _	✓	✓	\checkmark	 ✓
//		,	0×Ω3			P	X	√	, I v	í
<u></u>	hildron'e.	<u>د</u>					par de marc	en de ce	ane the	 = 11
						·····				
0×07		G	x	X	\checkmark	~	\checkmark	\checkmark	\checkmark	\checkmark
0×08	PG Parental Guidance Recommended	PG	X	X	X	~	~	V	~	~
0×09		PG	x	X	Х	~	~	\checkmark	\checkmark	\checkmark
0×0A	M Mature Audience 15+	М	X	X	X	X	~	~	~	~
0×0B		М	x	X	Х	x	\checkmark	\checkmark	V	\checkmark
0×0C	MA Mature Adult Audience 15+	MA	X	X	X	X	X	~	~	~
<u>0×0</u> D		МА	x	X	x	X	X	· · · · · · · · · · · · · · · · · · ·		 ✓
0×0E	AV Adult Audience, Strong violence 15+	AV	x	X	X	×	X	×	~	v
0×0F	R Restricted 18+	R	X	Х	х	х	х	Х	х	\checkmark

APPENDIX 4 GLOSSARY

- * Aspect Ratio: It is the ratio of the width of the screen to the height. The two relevant digital TV formats are 16:9 (wide-screen) or 4:3 (the traditional screen ratio). 16:9 is more ergonomically suitable for the human eye.
- * Bandwidth: It is the frequency range that allows for carrying a certain radio signal.
- * Coaxial Cable: A type of cable used to transmit high frequency signals e.g. from the VHF/UHF antenna to the terrestrial Digital TV receiver.
- * Composite Video: There are three elements of the video system: First the "active video" which means the picture to be displayed on the screen and its associated colors; second the "sync" decides where to place each pixel on the screen; third the "blanking" tells the display when to turn off the electron beam so no retrace across the screen. These three elements combined together is called "composite video" when connecting to a display through connectors.
- * **Dolby® Digital:** Dolby® Digital is a method of transmitting and storing multi-channel soundtracks via newer digital media such as DVD, digital cable, digital TV (DTV), and satellite transmissions.
- * DVB: Abbreviation for "Digital Video Broadcasting". An international organization created in October 1993, whose primary objective is to achieve a common framework for all technical platforms of digital broadcasting systems including DVB-C (cable), DVB-S (satellite) and DVB-T (terrestrial), etc.
- * EPG: Stands for "Electronic Program Guide". It is an application that allows viewers to navigate through the large number of channels offered by digital TV broadcasters.
- * Frequency: The property of a signal measured in cycles per second (=Hertz).
- * HDCP: HDCP is a specification developed by Intel Corporation to protect digital entertainment content across the HDMI interface.
- * HDMI: Abbreviation for High-Definition Multimedia Interface. HDMI combines high-definition video and multichannel audio in a single digital interface to provide crystal-clear digital quality over a single cable.
- * Letterbox: The picture with aspect ratio 16:9 in a 4:3 TV screen with blank lines on top and bottom. It is the means to watch a wide screen TV program on a 4:3 TV screen.
- * Megahertz (MHz): Millions of cycles per second, which describes frequencies of radio wave or electric current.
- * Mini D-Sub 15-pin Cable: A type of video cable used to carry analogue RGB video signals.
- * OSD: Stands for "On Screen Display". It provides clearer menu functions by using the TV or monitor to display the menu while the controls are on the remote control.
- * **RF Channel**: Radio Frequency Channel, for instance channel 28 for SBS Network in analogue TV transmission. However, in digital TV, one RF channel may carry 4 to 6 sub-channels like SBS HD and SBS Digital.
- * RGB: Stands for Red, Green and Blue. RGB video is the highest quality video currently used in the AV industry.
- * S-Video (also called Y/C): The standard for the way a video signal is carried on the cable. Y represents brightness and C represents color. S-Video cables have separate wires for the color and brightness so it offers a better picture quality than the composite video.
- * VHF: Stands for "Very High Frequency", starts from 30 to 300MHz corresponding to channels 2-12, including Bands I, II and III.

- * Video format: It is the picture resolution of the video defined as number of pixels per line x number of horizontal lines, interlaced/progressive.
 For Standard Definition (SD), the picture resolution is 720 pixels × 576 lines, interlaced (576i).
 For High Definition (HD), the minimum picture resolution is 720 × 576, progressive (576p)⁶.
 Other HD formats are 1920 × 1080i and 1280 × 720p.
- * UHF: Stands for "Ultra High Frequency", starts from 300 to 3000MHz corresponding to channels 13-69, including Bands IV and V.
- * $Y/P_B/P_R$: Color difference signal, which is better than S-Video and Composite Video in terms of picture quality. Y, P_B and P_R are the standard video connectors found in HDTVs.

⁶ 576p is classified as HD format in Australia. However, it may be classified as SD format in some other regions.

System	
Compliant Standard	DVB-T
Video Decoding	MP @ ML & MP @ HL
Audio Decoding	Dolby [®] Digital, MPEG (I & II)
Audio Sampling Rate	32, 44.1, 48 kHz
Townsetwiel Tuner / Downselule	4
Terrestrial Tuner / Demodula	tor 51~858 MHz
Frequency Loop Through	51~656 MHz
Bandwidth	6, 7, 8 MHz
Demodulator	COFDM
FFT Mode	2K, 8K
Constellation	QPSK, 16QAM, 64 QAM
Guard Interval	1/4, 1/8, 1/16, 1/32
Inner Coding Rate	1/2, 2/3, 3/4, 5/6, 7/8
Video Output	
Video Output Format	1920 × 1080i, 1280 × 720p, 720 × 576p, PAL (720 × 576i)
Vertical Scan Rate	50 Hz
Aspect Ratio	4:3, 16:9
Digital Audio Output Mode	Decompressed PCM, Compressed Dolby Digital
Front Panel	
IR Receiver	Yes
Function Control	9 Keys
Channel/Clock Display	4 Digits / 7-segment display
Rear Panel	
Tuner Input	$1 \times RF PAL Female$
	$1 \times RF$ PAL Female $1 \times RF$ PAL Male
Tuner Input	
Tuner Input Tuner Output	1 × RF PAL Male
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port	$1 \times RF$ PAL Male 1 $\times RS$ -232 (for external control and software upgrading) 1 1
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 1 5 × RCA, 1 x Mini D-Sub 15-pin
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port)
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port	 1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port	 1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Video Output Port	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin 1 × RCA
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port	 1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Video Output Port Stereo Audio Output Port	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin 1 × RCA
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Video Output Port Stereo Audio Output Port Power Supply	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin 1 × RCA 4 × RCA
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Stereo Audio Output Port Stereo Audio Output Port	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin 1 × RCA
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Stereo Audio Output Port Stereo Audio Output Port Power Supply Input Voltage Consumption (max.)	$\begin{array}{l} 1\times \text{RF PAL Male} \\ 1\times \text{RS-232 (for external control and software upgrading)} \\ 1 \\ 1 \\ 5\times \text{RCA, 1 x Mini D-Sub 15-pin} \\ 3\times \text{RCA (Shared with RGB in RGBHV Output Port)} \\ 1\times \text{S/PDIF Optical, 1 } \times \text{S/PDIF Coaxial} \\ 1\times \text{Mini Din 4-pin} \\ 1\times \text{RCA} \\ 4\times \text{RCA} \end{array}$ $\begin{array}{l} 100\mbox{-}240\ V_{AC}\mbox{, 50/60 Hz} \end{array}$
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Video Output Port Stereo Audio Output Port Stereo Audio Output Port Dimension	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin 1 × RCA 4 × RCA 100~240 V _{AC} , 50/60 Hz ~18 W
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Stereo Audio Output Port Stereo Audio Output Port Stereo Audio Output Port Dimension (max.)	$\begin{array}{l} 1\times \text{RF PAL Male} \\ 1\times \text{RS-232 (for external control and software upgrading)} \\ 1 \\ 1 \\ 5\times \text{RCA, 1 x Mini D-Sub 15-pin} \\ 3\times \text{RCA (Shared with RGB in RGBHV Output Port)} \\ 1\times \text{S/PDIF Optical, 1 } \times \text{S/PDIF Coaxial} \\ 1\times \text{Mini Din 4-pin} \\ 1\times \text{RCA} \\ 4\times \text{RCA} \\ \end{array}$ $\begin{array}{l} 100\ \ 240\ V_{AC}\ \ 50/60\ \text{Hz} \\ \ \sim 18\ \text{W} \\ \end{array}$ $\begin{array}{l} 360\times 250\times 70\ \text{mm} \end{array}$
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Video Output Port Stereo Audio Output Port Stereo Audio Output Port Dimension	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin 1 × RCA 4 × RCA 100~240 V _{AC} , 50/60 Hz ~18 W
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Stereo Audio Output Port Stereo Audio Output Port Stereo Audio Output Port Dimension (max.)	$\begin{array}{l} 1\times \text{RF PAL Male} \\ 1\times \text{RS-232 (for external control and software upgrading)} \\ 1 \\ 1 \\ 5\times \text{RCA, 1 x Mini D-Sub 15-pin} \\ 3\times \text{RCA (Shared with RGB in RGBHV Output Port)} \\ 1\times \text{S/PDIF Optical, 1 } \times \text{S/PDIF Coaxial} \\ 1\times \text{Mini Din 4-pin} \\ 1\times \text{RCA} \\ 4\times \text{RCA} \\ \end{array}$ $\begin{array}{l} 100\ \ 240\ V_{AC}\ \ 50/60\ \text{Hz} \\ \ \sim 18\ \text{W} \\ \end{array}$ $\begin{array}{l} 360\times 250\times 70\ \text{mm} \end{array}$
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Stereo Audio Output Port Stereo Audio Output Port Stereo Audio Output Port Dimension Size ($W \times D \times H$) Weight Environmental Data	1 × RF PAL Male 1 × RS-232 (for external control and software upgrading) 1 5 × RCA, 1 x Mini D-Sub 15-pin 3 × RCA (Shared with RGB in RGBHV Output Port) 1 × S/PDIF Optical, 1 × S/PDIF Coaxial 1 × Mini Din 4-pin 1 × RCA 4 × RCA 100~240 V _{AC} , 50/60 Hz ~18 W 360 × 250 × 70 mm 2.8 kg (Unpacked)
Tuner Input Tuner OutputSerial PortVideo Output Mode Switch HDMI Output Port RGBHV Output Port Digital Audio Output PortS-Video Output Port S-Video Output Port Stereo Audio Output PortPower Supply Input Voltage Consumption (max.)Dimension Size (W \times D \times H) WeightEnvironmental Data Operating Temperature	$\begin{array}{l} 1\times \text{RF PAL Male} \\ 1\times \text{RS-232 (for external control and software upgrading)} \\ 1 \\ 1 \\ 5\times \text{RCA, 1 x Mini D-Sub 15-pin} \\ 3\times \text{RCA (Shared with RGB in RGBHV Output Port)} \\ 1\times \text{S/PDIF Optical, 1 } \times \text{S/PDIF Coaxial} \\ 1\times \text{Mini Din 4-pin} \\ 1\times \text{RCA} \\ 4\times \text{RCA} \\ \end{array}$ $\begin{array}{l} 100\ \ 240\ V_{AC}\ \ 50/60\ \text{Hz} \\ \ \sim 18\ \text{W} \\ \end{array}$ $\begin{array}{l} 360\times 250\times 70\ \text{mm} \end{array}$
Tuner Input Tuner Output Serial Port Video Output Mode Switch HDMI Output Port RGBHV Output Port Y/P _B /P _R Video Output Port Digital Audio Output Port S-Video Output Port Stereo Audio Output Port Stereo Audio Output Port Stereo Audio Output Port Dimension Size ($W \times D \times H$) Weight Environmental Data	$1 \times \text{RF PAL Male}$ $1 \times \text{RS-232 (for external control and software upgrading)}$ 1 $5 \times \text{RCA, 1 x Mini D-Sub 15-pin}$ $3 \times \text{RCA (Shared with RGB in RGBHV Output Port)}$ $1 \times \text{S/PDIF Optical, 1 \times S/PDIF Coaxial}$ $1 \times \text{Mini Din 4-pin}$ $1 \times \text{RCA}$ $4 \times \text{RCA}$ $100 \sim 240 V_{AC}, 50/60 \text{ Hz}$ $\sim 18 \text{ W}$ $360 \times 250 \times 70 \text{ mm}$ $2.8 \text{ kg (Unpacked)}$ $5^{\circ} \sim 40^{\circ}\text{C}$

Note: Specifications are subject to change without notice.

Accessories

•	Remote Control (CT-8001)	× 1
•	Audio/Video cable	× 1
•	Component Video cable (Y/P _B /P _R)	× 1
•	Power cord	× 1
•	R03 (AAA size) battery	× 2
•	Owner's Manual	× 1

APPENDIX 6 INSTRUCTION GUIDE FOR PROGRAMMING REMOTE CONTROL

The remote control can be compatible with various brands of TV by setting their control codes. The TOSHIBA code has initially been set to control TOSHIBA TVs. Refer to the four methods below for programming your remote control and use the one that best suits your setup. (Note: Every change of batteries in the remote control unit will result in a reset to the default Toshiba code of 138)

Due to the great variety of TV systems, some makes and models are not compatible with your receiver's remote control. If you reach the end of the available codes without finding a code that works with your device, you will need to use your TV system's remote control to turn it on and off, and control the volume. Even if the code is found, there is a possibility that not all the buttons on your receiver's remote control will work with your TV. Control codes for regions Europe, USA and China are available on pages 61 to 68.

1. Programming

- (a) Refer to the code list for the 3-digit code of the TV brand.
- (b) Press the "TV FUNCTION" button to set the remote control operating your TV.
- (c) Press and hold the "PROG." button, then enter the three digits of your TV brand code using the "CHANNEL NUMBER" buttons.
- (d) Check response on LED with every digit pressed;
 - 1) LED lights up after the first digit press
 - 2) LED blinks once after the second digit press

3) If the code is available, LED goes off after the third digit press or else the LED will blink twice and goes off, indicating unavailable code. Go back to step (c) if an unavailable code was entered.

- (e) Release "PROG." button to leave the programming mode.
- (f) Point the remote control at your TV and use each button listed below to make sure your TV is operated correctly. (Refer to page 13 and 14 for location of buttons on remote control unit)
 STANDBY/ON , INPUT SELECT, MUTE, CHANNEL UP/DOWN, VOLUME UP/DOWN, CHANNEL NUMBER and DIGIT SELECTION buttons.

2. Auto code search (Region)

If none of the codes listed allows you to control your TV, a code search may detect the correct code. This function performs a forward search in the code list by region.

- (a) Turn on your TV. Press and hold the "PROG." button, then press the "TV FUNCTION" button.
- (b) LED lights up, indicating that the remote control is now in programming mode. (LED will go off and remote control exits programming mode if the "TV" button is pressed or no further activity is sensed after ten seconds)
- (c) Release the "PROG." and "TV FUNCTION" buttons.
- (d) Input the code "994" (for Europe models) or "995" (for US models) or "996" (for China models).
- (e) The remote control is now in "Auto code search" mode.

- (f) Point the remote control at the TV. Every 1.5 seconds, the LED blinks once and the remote control automatically sends out "POWER" button signal 5 times from the next code in the list. The test is successful if the TV responds by powering off.
- (g) Press the "POWER" button on the remote control immediately after the TV powers off. This exits "Auto search mode" and turns the LED off.
- (h) Test other buttons to make sure your TV is operated correctly (Refer to step (f) of Programming method on previous page). If unsuccessful, repeat from step (a).
- (i) To quit "Auto code search" at any point, press any button on the remote control. Next search performed will start at the code left off the previous time.
- Note: The remote control will leave "Auto code search" automatically if all codes in the list for the chosen region have been searched and is indicated by the LED turning off.

3. Brand code display

This function shows the current programmed code in the remote control. There are 3 digits in the control code and any digit can be displayed.

- (a) Press and hold the "TV FUNCTION" and "PROG." button, LED lights up.
- (b) Release the "PROG." and "TV FUNCTION" button. The remote control is now in "Brand code display" mode.
- (c) Press either "1" or "2" or "3", depending on which digit of the code you wish to know. The number of blinks in the LED represents the code (if there is no blink, the code is 0).
- (d) LED goes off and remote control exits "Brand code display" mode if the "TV" button is pressed or no further activity is sensed after ten seconds

4. Auto code search

This function is similar to "Auto code search (Region)" except that a forward search in the code list is performed for all regions.

- (a) Turn on your TV. Press and hold the "PROG." button, then press and hold the "POWER" button for 3 seconds.
- (b) LED lights up. Release the "PROG." and "POWER" buttons. The remote control is now in "Auto code search" mode indicated by a blinking LED.
- (c) Point the remote control at the TV. Every 1.5 seconds, the remote control automatically sends out "POWER" button signal 5 times from the next code in the list. The test is successful if the TV responds by powering off.
- (d) Press the "POWER" button on the remote control immediately after the TV powers off. This exits "Auto search mode" and turns the LED off.
- (e) Test other buttons to make sure your TV is operated correctly (Refer to step (e) of Programming method on previous page). If unsuccessful, repeat from step (a).
- (f) To quit "Auto code search" at any point, press any button on the remote control. Next search performed will start at the code left off the previous time.
- Note: The remote control will leave "Auto code search" automatically if all codes in the list have been searched and is indicated by the LED turning off.

Code list for European Market

Oceanic(F) Otto Versand RCA	005,040,105,106,	BRAND	CODE	BRAND	CODE
	107	Onceas	004	Orion	006,016,028,057, 088,108,109,187 188,189,253
RCA	025,027,044,052, 055	Pael	003,008	Palladium	197
	204,210,211	Rediffusion(UK)	005,041,116	REX	011,021,032,078, 079,118
Roadstar	039	SABA	065,067,075,085, 098,099,100,103, 117,155,185,186, 222,224,269	Saisho	004,006,028,088, 182,244
Salora	005,047,048,055, 066,068,069,076, 082,086,097,162, 177,195,249,250, 267,268	Sambers	004,008,029,030, 043,269	Samsung	026,033,043,159, 160,170,175,212, 215,272,273,286
Sanyo	013,031,044,074, 119,120,121,122, 123,162,167,170, 182,195,205	Schneider	004,011,015,019, 025,036,038,255, 258,262	SEG	096
Seleco	011,058,078	Sharp	044,054,119,124, 196,198,225,227	SHOV	033
Siarem	025,029,155,269	Sicatel	001	Siemens	010,231,232,233, 234,236
Siesta	254	Silver	160	Singer	025,029,147,149, 155
Sinudyne	006,016,025,026, 029,057,109,125, 155,192,197,253	Sony	028,119,126,127, 128,129,130,182, 199,228,260,275	Stern	078
Panasonic/National	001,003,019,037, 040,106,110,111 112,114,190,212, 241	Philco	019,023,024,025, 151,155,169,170, 231	Philex	229
Philips	003,026,027,046, 073,113,115,155 191,192,193,194, 223,230,242,266	Phonola	175	Pilot (1624Y)	299 (PIP)
Pilot (P1277Y)	291	Pilot (P3033)	297	Pilot (P4005)	296
Pilot (P567)	298	Pilot (P286)	294	Pioneer	027,067,243,269
Polestar	214	Prandoni-Prince	008,032,146	Praxis	217
Prosat	001	Quelle	004,005,007,008, 009,010,013,026 027,028,045,050, 051,052,069,094, 153,221,231,232, 234,235,236,253	Radiola	242
Rank(UK)	022	RBM(UK)	022,094	Tai Wah.	218,219
Tandberg	180,253,266	Tatung	002,004,026,028, 031,131	Technovision	263
Tele +1	248	Teleavia	186	Telefunken	067,075,098,132, 133,134,135,140 185,186,231,235
Teleservice	203,246	Tensai	013,016,033,037, 039,178	Thomson	065,067,075,078, 098,100,103,185 186,222,292
Thorn-Ferguson	001,135,136,137, 140,144,148,152 160,186,229,256	Toshiba	022,044,094,119, 138 ⁷ ,139,141,142, 190	Uher	011,012,036,037, 038,078,255
Ultravox	003,025,082,096, 146,155	Universum	094,160,221	Univox	001
	169	Videocon	033,138,141,285	Voxson	032,155
	037	Watt Radio	001,003,025,029, 030,057	Wega Color	119,143
Vegavox Watson		Yoko	004,159	Zanussi	078
Watson White Westinghouse	003,037,159	Others	206,207,208,264,	(BEIJING)	276,281
Watson	203,237		265		
Watson White Westinghouse Zenith	203,237	(Chang Hong)	141,175,281,287, 288,289	/ /	281
Watson White Westinghouse	203,237 160 281		141,175,281,287, 288,289 279,281		278
Watson White Westinghouse Zenith	203,237		141,175,281,287, 288,289	/ / (KONKA)	

⁷ Code 138 is the default code pre-programmed into the remote control unit.

Code list for USA Market

BRAND	CODE	BRAND	CODE	BRAND	CODE
A-mark	402	Abex	412	Admiral	424
Adventura	414	Aiko	423	Akai	411
Alaron	439	Allegro	457,458	Ambassador	437
Anam	419,440	AOC	402,406,411,441	Archer	402
Audiovox	402,423,440,450, 455	Aumark	421	Baysonic	440
Belcor	406	Beuamark	404,411,439	Bradford	440
Broksonic	402,444,451	Brokwood	406	Candle	411,414,420,442
Carnivale	411	Carver	418	Celebrity	461
Cineral	423,450	Citizen	411,413,414,420, 421,423,442,446	Clairtone	441
Concerto	420	Contec	432,440,441,467	Contec/cony	472
Craig	440	Crosley	418	Crown	413,440
CXC	440	Curtis Mathes	411,413,418,420, 421,424,427,435, 450,452,459,460, 467	Daewoo	406,413,423,450, 455,456
Daytron	406,413	Denon	427	Dumont	404,406
Dwin	457,458	Electroband	441,461	Electrohome	448,467
Emerson	406,413,437,438, 439,440,441,444, 446,447,451,455, 456,462,467,475, 476	Envision	411	Fisher	430,433,470
Fujitsu	439	Funai	436,439,440	Futuretech	440

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BRAND	CODE	BRAND	CODE	BRAND	CODE
Semp	431	Sharp	413,424,432,434, 449,481,467	Shogun	406
Signature	403	Silvania	407,409,411,425, 442	Simpson	442,443
Sony	426,461	Soundesign	438,439,440,442	Spectricon	402
Squareview	436	Starlite	440	Supre-Macy	414
Supreme	461	Sylvania	418,443,448,465, 469	Symphonic	436
Tandy	424	Tatung	402,419,471	Technics	404,415,416,445, 460
Technika	403,406,413,418, 420,421,423,428, 439,440,442,472	Technol Ace	439	Techwood	402,420
Telefunken	420	Teknika	467	ТМК	420,437,438
Toshiba	421,430,431,470, 471,472	Tosonic	441	Totevision	413,467
Trical	432	Universal	408,410	Vector research	411
Victor	417	Vidikron	418	Vidtech	406,438
Viking	414	Wards	407,408,410,411, 418,420,425,426, 431,434,438,439, 443,465,466	Westinghouse	455,456
Words	403,406	Yamaha	406,411	Zenith	403,404,423,428
Zonda	402	Some models	468		

Code list for China Market

DDAND	CODE			PDAND	CODE
BRAND Aiwa ()	CODE 606,816,819	BRAND Akai (/)	CODE 628,644,648,715,	BRAND Anam	CODE 623,642,746,759
Aiwa ()	000,010,019		716,738,765,770, 771,845	Andin	023,042,140,139
AOC ()	700,776	Candle/Citizen()	714,732,776	Centurion	651
Changhong()	603,606,618,621, 633,636,648,649, 657,659,676,677, 681,682,684,685, 686,718,724,742, 744,745,765,769, 770,771,773,774, 775,788,791,798, 801,803,805,808, 816,819,825,826, 827,836,838,840, 841,843,844,846, 848,849,850,854, 900,901,908,915, 916,917	Concerto	714	Conrowa()	632,637,641,648, 674,681,683,754, 755,757,758,763, 765,768,770,771, 906,907,908
Contec/Cony	623,727	Craig	623,746,759	Curtis Mathes	651,776
CXC	623	Daewoo ()	607,700,782,794 817, 835	Daytron	651
Eastern ()	607,649,664,676, 762,773,775,777, 781,782	Electrohome	644	Emerson ()	623,713,737
Envision	776	Etron()	614,648,702,765, 770,771,773,775	Fisher()	717, 768
Funai/Fullness (/)	623,630,737	G.E. ()	642,746,759,780	General (Fujitsu) ()	655,763
Goldstar ()	606,626,678,682, 684,685,686,691, 697,700,709,714, 715,716,718,721, 800,801,803,805, 808,823,908	Haier()	701,740	Hisense()	632,637,638,641, 677,681,683,723, 724,754,755,757, 758,760,768,775, 829,840
Hitachi ()	628,634,637,638, 669,679,690,692, 695,699,714,716, 727,738,754,755, 757,758,760,763, 764,777	Imperialcown ()	607,648,649,664, 762,765,770,771, 774,775,777,782, 823,835	Infinity	682,908
JBL	682,908	JC. Penney	655	Jinxing()	602,626,632,635, 657,659,660,663, 671,677,682,700, 714,723,724,730, 736,742,744,745, 767,768,792,798, 840,908
JAC()	667,698,725,729 766,799	Kenwood()	626,715	Kloss Novabeam	645
KONKA()	601,602,604,605, 609,685,686,703, 704,718,726,728, 736,733,742,744, 745,751,752,769, 770,771,773,774, 775,783,784,785, 786,787,788,789, 790,791,792,793, 801,802,803,805, 808,821,822,828, 830,858,859,860, 861,862,863,864, 865,866,899,904, 906,908,909,912, 913	KTV	623	L/G Magnavov (686,718,808
Luxman	714	LXI	798	Magnavox ()	619,622,643,645, 647,651,655,682, 700,722,732,776, 908
Marantz()	651,776	MGA/ Mitsubishi ()	620,626,644,651, 673,676,700,705, 713,721,736,753, 776,795,842	Montgomery Ward	619,622,643,651, 682,700,713,737, 776,807,908

BRAND	CODE	BRAND	CODE	BRAND	CODE
МТС	700,776,714	NEC (/)	626,648,651,652, 676,680,700,714, 715,716,749,755, 765,770,771,773, 775,776,799,803	Olymmpic()	648,765,770,771
Optonica	807	Panasonic National (/) (/)	602,606,607,615, 616,617,630,638, 642,649,650,653, 658,664,675,681, 682,688,731,742, 746,747,756,759, 760,762,774,775, 777,791,809,810, 811,812,813,814, 818,823,831,832, 833,834,835,839, 842,847,851,854, 908	Panda()	602,605,606,611, 648,649,676,677, 678,681,684,685, 686,704,718,724, 735,736,746,759, 765,770,771,773, 774,775,798,801, 803,805,808,812, 813,814,816,819, 832,840,852,853, 854,855,856,857
Penney	700,776,780	Philco	908	Peony()	648,659,675,676, 682,685,686,718, 765,770,771,773, 775,801,805,808, 809,810,811,812, 813,814,908
Philips ()	619,622,626,643, 645,647,651,655, 682,684,685,686, 700,715,718,722, 732,741,742,753, 756,776,801,803, 805,808,908	Pilco	619,622,643,645, 647,651,655,682, 700,722,732,776	Pioneer (/)	750
Proton ()	713	Quasar	642,746,759	Radio Shack	623,807
RCA	700,780	Rowa	681,758,816,874	Sampo ()	651,676,773,775 776
Samsung ()	626,640,651,686, 700,714,715,716, 718,721,773,775, 776,781,800,805, 808,837	Sanyo ()	627,637,638,648, 663,678,681,694, 696,710,717,734, 754,757,760,765, 768,770,771,818	Scott	651,737
Sears	717,737,768,798	Sharp (/)	687,689,706,712, 720,743,748,773, 775,806,807,815	Sherwood()	773,775
Sky-Worth()	636,641,681,683, 684,685,686,718, 742,744,745,773, 793,801,803,805, 808,868,869,870, 871,872,873,874, 875,876,897,898, 899,902,903,904, 905,906,914	Sony (/)	600,602,612,613, 625,646,656,662, 681,682,684,685, 686,718,739,777, 796,797,801,803, 805,808,818,832, 842,845,874,910, 911	Soundesign	713,732
SSS	623,700	Sylvania ()	619,622,643,645, 651,655,682,732, 776,805,908	Tatung ()	802
TCL()	636,648,666,681, 682,684,685,686, 718,742,744,745, 767,770,771,789, 801,803,805,808, 820,834,870,874, 875,877,878,879, 880,881,882,883, 884,885,886,894, 895,898,908	Technics	731,747,839	Techwood	714
Teknika	623,644,700,714, 732,737	Tempest	659,767	Thakral()	761
ТМК	713	Toshiba ()	603,608,618,637, 638,648,649,657, 677,681,693,754, 757,760,762,765, 768,770,771,772, 773,777,798,800, 824	Ustar()	606,773,775, 816,819
Vidtech	700	Wards	619,622,643,651, 682,700,713,737, 776,807,908	Warumaia	607,782, 835

BRAND	CODE	BRAND	CODE	BRAND	CODE
Xoceco /Xogego	602,647,648,659,	Yamaha ()	700	Yorx	651
()	662,662,668,672,				
	678,681,765,770,				
	771,773,775,802,				
	832,842,867,887,				
	888,889,890,891,				
	892,893				
	708		637,648,649,676,		614,621
			678,684,685,686,		
			718,760,765,770,		
			771,793,801,803,		
			805,808,821,822		
	773,775		684,685,686,718,	(Conic)	607,614,621,635,
			773,775,801,803,		636,649,681,730,
			805,808		762,765,773,774,
					775,777,823,835
	613,649,664,676,		648,708,765,770,		621
	684,685,686,718,		771,773,775		
	774,775,777,782,				
	801,803,805,808				
	614,621,773,775		773,775	(TOBO)	614,621,648,678,
					765,770,771,775,
					860,874
	606,648,765,770,		648,676,765,770,		648,676,684,685,
	771,773,775,816,		771		686,718,765,770,
	819				771,801,803,805,
					808
(Beijing)	607,621,648,649,	(HUANYU)	606,648,676,684,		675,773,775
	657,664,676,682,		685,686,704,718,		
	684,685,686,704,		719,760,765,771,		
	718,762,765,770,		770,801 803,805,		
	771,773,774,775,		808,816,819		
	777,781,782,801,				
	803,805,808,823,				
	835,908				
	773,775		614,621,637,648,		684,685,686,718,
			765,770,771,773,		801,803,805,808
			775		
	676,773,775		606,816,819		678
	648,676,765,770,		607,621,648,649,		641,648,676,678,
	771		664,676,684,685,		683,765,770,771,
			686,718,762,765,		803
			770,771,773,774,		
			775,777,781,782,		
			791,801,803,805,		
			808,814,823,835		
	676,773,775,782		676,773,775		676,684,685,686,
					718,773,775,801,
					803,805,808
	676,773,775		773,775		648,765,770,771
	648,676,684,685,		630,675		621,649,664,762,
	686,718,765,770,		030,075		773,774,775,777
	771,801,803,805,				113,114,113,111
	808				772 775
	648,675,676,684,		676,684,685,686, 718,773,775,801,		773,775
	685,686,718,765,				
	770,771,773,775,		803,805,808		
	801,803,805,808				(40 /7/ /04 /05
	773,775		648,676,765,770,		648,676,684,685,
			771		686,718,765,770,
					771,801,803,805,
			(40 7/5 770 774		808
	607,649,664,762,		648,765,770,771,		636,684,685,686,
	773,775,777,781,		773,775		718,801,803,805,
	782,803,823,835		(7) 00/ 047		808
	676,684,685,686,		676,806,815		676,812,813,814
	718,765,773,775,				
	796,801,803,805,				
	808				
	648,675,765,770,		676		637,648,649,675,
	771,773,775				676,684,685,686,
					718,760,765,770,
					771,774,801,803,
					805,808

BRAND	CODE	BRAND	CODE	BRAND	CODE
	606,648,684,685, 686,718,770,771, 773,775,801,803, 805,808,816,819		606,816,819	(Shanghai)	606,635,648,661, 676,682,684,685, 686,718,730,733, 765,770,771,773, 775,791,801,803, 805,808,816,819, 908
	773,775,781,782		648,678,765,770, 771,773,775		676
	630,675,791,814		630,675,791,814		614,636,676,684, 685,686,704,718, 773,775,801,803, 805,808
	637,648,765,770, 771		637,773,775		648, 765,770,771
	708		606,648,676,684, 685,686,718,765, 770,771,801,803, 805,808,816,819		648,678,765,770, 771,773,775
	684,685,686,718, 801,803,805,808		676,684,685,686, 718,760,801,803, 805,808		773,775
	606,684,685,686, 718,801,803,805, 808,816,819		648,765,770,771, 773,775		676,773,775
	621,684,685,686, 718,773,775,801, 803,805,808		648,676,684,685, 686,718,765,770, 771,773,775,801, 803,805,808		773,775
	637,676,684,754, 755,760		676,684,685,686, 718,791,796,801, 803,805,808		676,686,765,775, 782,805,812,813, 814,835
	648,676,765,770, 771		648,676,765,770, 771,812,813,814		641,676,683,765, 773,775
	648,765,770,771		648,765,770,771		676,773,775
	676,775		606,816		676,684,685,686, 718,773,775,801, 803,805,808,815, 806
	648,765,770,771	888	648,765,770,771		648,765,770,771
	606,816,819		610		630,675,791,814
	676,684,685,686, 718,801,803,805, 808				

MEMO

APPENDICES

TOSHIBA